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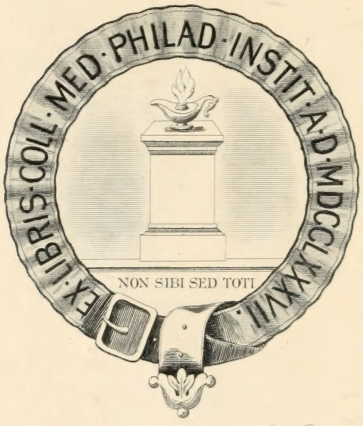

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ORIGINAL.

FLAP OPERATION IN PERINEORRHAPHY.*

BY O. D. FITZGERALD, M.D., LOS ANGELES, CAL.

In general terms, it may be said that perineorrhaphy, in any of its present modes, is an operation entered upon for the restoring of the rupture of the so-called perineal body. And for the present aims, all lacerations of the perineum may be divided into three grades or classes, each one of these requiring somewhat different surgical treatment in hope of restoring the parts as nearly as possible to their normal condition.

1. The simple laceration of the vaginal outlet not involving either the pelvic floor or sphincter, and not complicated by rectocele.

2. The rupture of the perineum, with either tear or overstretching of muscles, involving the floor of the pelvis, and complicated by rectocele or cystocele, or both, and more or less prolapse of the uterus.

3. Rupture of the perineum involving the sphincter ani and more or less of the recto-vaginal septum, and which may or may not be accompanied by prolapsus of the womb. Indeed, it often happens in these cases that there is no tendency to prolapse, owing, it is thought, to adhesions following the severe injury to the pelvic floor.

The so-called pelvic floor is the levator ani muscle with the vesical fascia above it and the anal fascia below it. It is composed of two segments divided by the vaginal lumen.

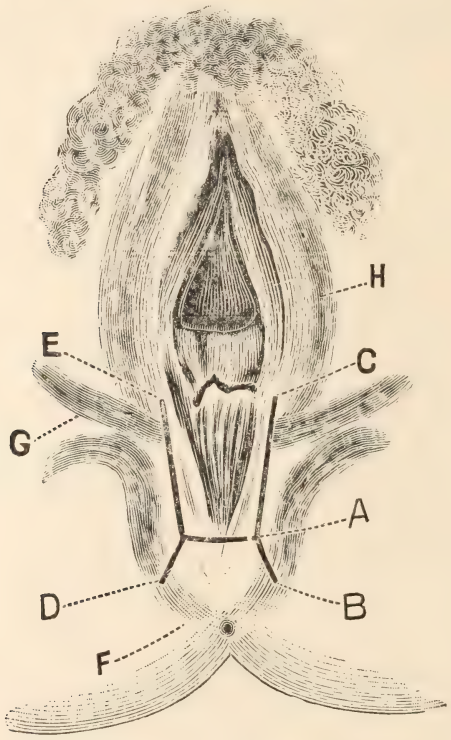
To the anterior or pubic segment belong the recto-pubic fat, the bladder and anterior vaginal wall. It is called variously, (a) The anterior. (b) The pubic. (c) The vesical. (d) The movable. (e) The obstetrical pelvic segment.

To the posterior segment of the pelvic floor belong the posteror vaginal wall, the perineum and rectum. It is named: (a) The posterior. (b) The vertebral. (c) The sacral. (d) The fixed pelvic segment.

Now these two segments, the sacral and pelvic, act like two valves which close an opening by overlapping each other. The chief valve or support is the sacral segment. The anterior edge of the sacral valve or pelvic segment

*Read at the Fourteenth Semi-Annual Meeting of the Southern California Medical Society held at Pasadena and Echo Mountain, December 5 and 6, 1894.

is tipped or bound by dense fibro-elastic tissue, and known as the perineal body. The uterus lies immediately above the valve, while the perineum lies immediately below this segment, and the only way we can have uterine prolapse or sacro-pubic hernia is by the opening up of this valve or support. In the virgin these segments are closed, and these valves are opened up naturally by labor. They are opened up artificially by the admittance of air into the vagina, and pathologically by uterine prolapse, the result of loss of normal support from the laceration of the so-called sacro-pubic segments.



CUT NO. 1.

A—First Incision. D—Fourth Incision.
B—Second Incision. E—Fifth Incision.
C—Third Incision. F—Sphincter Ani.
G—Transverse Perinei.

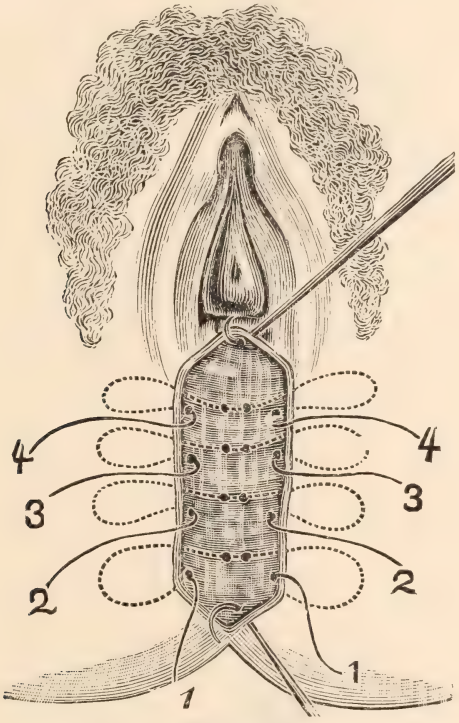
To demonstrate this: If a woman suffering from descensus uteri be placed upon a table and told to "bear down," one sees coming out, first, the anterior vaginal wall; second, the cervix uteri, and, third, the posterior vaginal wall, thus demonstrating that the anterior segment, retro-pubic fat, bladder and rectum are all involved in the prolapse, and also we find that a part of the sacral segment, (posterior vaginal wall) is included in the prolapse.

It is claimed that the three great factors in uterine prolapse are: 1. Intra-abdominal pressure. 2. Deficiency of the sacral segment. 3. Loss of tone in the pubic segment.

The sacral segment is curved, and the tip is the perineal body. Now if it is straightened out and its tip, the perineal body, is torn, then the uterus simply slides out of the pelvis between the pelvic valves. Therefore it seems

clear that the perineal body is an indirect support in preventing uterine prolapse, or, as termed by many, sacro-pubic hernia.

It is a remarkable fact to be wondered at that so little is found in our leading text-books on obstetrics, on the female perineum, its form, function or general characteristics. The stereotyped method of disposing of the anatomy of this important structure is to pronounce it "the floor of the pelvis." "The space extending from the inferior commissure of the vulva to the anus, and composed of skin, cellular tissue, aponeurotic union of muscles and the mucous membrane of the vagina." Tyler Smith begins his remarks upon this subject by saying, "To the obstetrician, the anatomy of this part is a matter

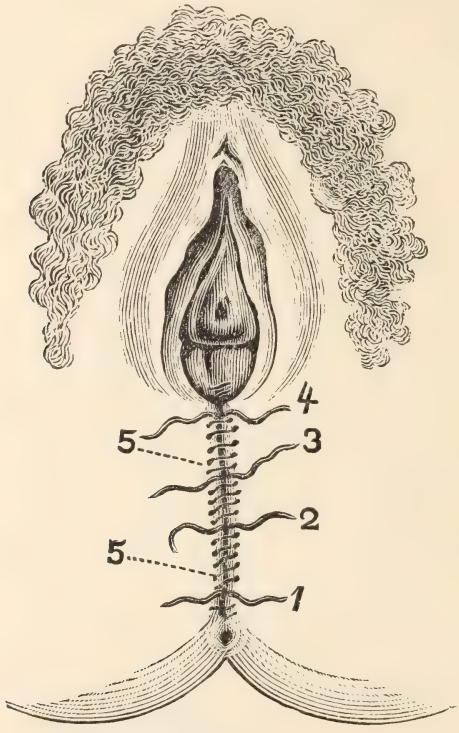


CUT NO. 2.
I, 2, 3 and 4—Silkworm Gut Sutures in Position.

of great interest," and yet he gives, in substance, such a descripton of it as stated above, and represents it by an illustration showing the union of the sphincters of the anus and vagina. Playfair in his late work dismisses the subject, which he pronounces one "of great obstetrical interest" with less than eight lines, just three more than Leishman has allotted to it, and four more than it received from Meadows. Among our own authors I mention Meigs who describes the fourchette quite at length, but does not mention the perineum at all. Nor is any mention made of its anatomy by Bedford, Byford or Miller. These writers may excuse this omission by the assertion that they do not write of anatomy, but of obstetrics, and that the student should come to them informed upon this subject. Thomas on the "Diseases of Women" informs us that Cruveilheier, one of the most accurate writers on gross anatomy, after describing the external organs of generation, limits his

remarks on the female perineum to an enumeration of its muscles and fascia, saying not a word of its function, shape or relation to the pelvic viscera. Wilson and Gray, two of our best anatomists, after enumerating the organs of generation in woman, say nothing of the perineum. Holden, on the middle of a page, in large letters has, "The Dissection of the Female Perineum," and not one word follows about the perineum he started out to talk about.

I am aware that a difference of opinion prevails among authors as to the utility of the perineal body in the economy of the female genitals, but from



CUT NO. 3.
1, 2, 3 and 4—Silkworm Gut Sutures Tied.
5, 5—Superficial Horse-hair Sutures.

faithful research of various authors, and a fair opportunity in observing this subject, I venture to claim for the perineal body the following:

1. It sustains the lower end of the anterior rectal wall and posterior vaginal wall.

2. It supports and directs the discharging end of the rectum backward, and the discharging end of the vagina forward.

3. It not only keeps the discharging ends of the rectum and vagina widely apart, but it gives both a substantial support in a curved direction at their termination, thus affording mechanical advantages for maintaining closure of both apertures, and preventing the easy escape of the contents of either. The wide separation of the two ends of the canals avoids mingling of the secretions and consequent infection and irritation from decomposition. The

backward curve of the rectum and the forward curve of the vagina is an important factor in support and prevents gaping and eversion.

4. The perineal body is the point of union of four muscles: the levator ani, the sphincter ani, the bulbo-cavernosus and the transversus perinei, besides the collection of dense connective and elastic tissue. The perineum is the skin covering the perineal body, and extending from rectum to vagina. The perineal body extends up between the rectum and vagina, but dissections show that it has been exaggerated in its length by many gynecological text-books.

5. The perineal body acts as a support to the pelvic floor.

6. It strengthens a tried point in labor.

7. Laceration of the perineal body to any considerable extent destroys the nice balance between anatomical structure and physiological function.

The object of the flap perineorrhaphy is: 1. To restore partial ruptures. 2. To restore rectal function from complete ruptures. 3. To prevent prolapse of the pubic segment. 4. To prevent uterine prolapse.

The etiological factors of lacerations are: 1. Labor. 2. Coitus. 3. Trauma. Partial perineal laceration may be accompanied by 1. Increased vaginal secretions. 2. Vulvar patency. 3. Instability from pathological conditions of nerve endings. 4. Neurosis from continued reflexes. 5. Endometritis from infection or irritation. 6. Descent of anterior rectal wall, posterior vaginal wall, and uterus. 7. Prolapse of bladder. Complete laceration may be accompanied by 1. Anal and vulvar patency. 2. Increased vaginal and rectal secretions. 3. Hemorrhoids. 4. Incontinence of vaginal and bowel contents. 5. The mingling of secretions induces disease by decomposition, e. g., eczema. 6. Neurosis from reflex irritation due to disease at the nerve ends. 7. Hypertrophy as well as atrophy of lacerated parts will induce reflexes. 8. The mal-nutrition of the parts involved will cause relaxed tissues and prolapse will ensue.

From a historical research we find that perineorrhaphy began with Paré, in France in the first half of the 16th century, and with some success; but for some cause, after his day, failure was so frequent that the operation was gradually abandoned until about the beginning of the present century, Roux again revived it. After him came Baker Brown of London and Dieffenbach of Berlin, using the quill suture as did Roux. Since then, Sims, Emmet, Thomas, Skene and others in our country, have performed the operation as well as Langenbeck, Simon, Hegar, Schroeder and Martin of Germany, and many others in France and England.

But the operation for the repair of the perineum, as at present recommended, which is the most useful and simple method of restoring the lost function of the perineum is the so-called Tait's split-flap operation; Saenger of Leipsic, who, in his valuable work has elaborated the subject, has shown that Prof. Voos of Christiana has well described this method by two excellent diagrams.

I have been impelled to bring this subject before the members of this Society thus fully, because I am quite sure that the operation proposed is the most scientific and, at the same time, the simplest and the most rapidly performed of any of the flap kind. I am sure from personal experience that the technique of the operation is not generally understood except by ocular demonstration, and it is hoped that by the drawings here shown we shall the better demonstrate the subject. I have learned by experience that directions for the proper doing of this operation are often misleading, or, at least, meager.

If a woman with a lacerated perineum is placed on the table on her back and the labia are well separated, one can at once appreciate the old white cicatricial line which represents the healed track or line of the original tear. And it may be observed that this line or cicatrix is *transverse* in direction while the fresh tear in the perineal body is perpendicular. The perineum tears in a direction from the vagina toward the rectum; but the peculiarity is that it *heals* in a perpendicular direction to the original rent. So that if the perineum tears in the direction from the vagina towards the rectum, it will heal exactly at right angles to the original wound, and we will have a cicatricial line running towards the tuberosities of the ischia. I hope we have made ourselves understood, because the flap-splitting theory is founded on the very peculiar method of healing in the perineal laceration.

The operation is performed with the patient in the lithotomy position, perfectly anesthetized, and under strict antiseptic precautions, the pubes having been shaved and scrubbed and covered with a thick antiseptic pad held on by a perineal bandage for 24 hours previous to the operation. I confine my remarks for the present to the steps taken in perineal lacerations of the first and second grades, as heretofore mentioned, and afterward shall report a case of the third variety. Having properly prepared the patient and the instruments, with needles, sutures, etc., carefully assorted, in proper pans of carbolized water, the operator, with a pair of sharp pointed (shouldered) scissors, proceeds to make the first cut or clip by entering the point of the scissors at the middle of the recto-vaginal septum for about one-half to three-fourths of an inch, or as far up as seems necessary in each individual case. Then, from each end of this incision, under and upper cuts are made, the former passing downwards and somewhat outwards on each side of the anus and being about one-third of an inch in length, the latter passing up into the labia majora and extending as high as the cicatrix reaches, usually about one inch. This makes a large wound somewhat in shape like the letter H, with the sides longest above the horizontal part, and presenting two flaps, above the vaginal, below the rectal. A tenaculum is now inserted into the edge of the middle of each of these flaps, the lower one everted and drawn over the anus, and the upper everted in the same manner and drawn up over the vulva. We now have a large irregularly quadrilateral wound with a large thin flap of vaginal tissue above, and a small one of mucous membrane below, and the two lateral margins composed of skin, fat and cellular tissue, and *last, but not least,* the aponeurotic and muscular structures that we wish to bring together. These margins, about one inch apart, are now brought together and united in the median line by *deep* sutures, which are inserted *just* inside of the skin, care being taken not to pierce the integument, and are so passed as to go well back under the skin, and include the muscular structures (sphincter ani, transversus perinei, etc.) The first stitch is of special importance if the rupture has extended wholly or partly through the sphincter ani, and it should be so inserted that it will pick up the divided and retracted ends of this muscle. Four or five sutures of this kind are usually all that are needed. When they are tied, the knots will lie between the edges of the skin, forming the lips of the wound, which very nearly approximate. The vaginal and anal flaps are now found to be wrinkled up in bunches at respective ends of the wound. The operation is best concluded by tying the four silkworm-gut sutures, and then reenforcing the lips of the wound by a continuous suture of horsehair or cat-gut. This precaution is not urged or used, as I understand, by Mr. Tait, hence is left entirely

optional. The silkworm knots are left exposed so as to avoid the pain which would otherwise be inflicted in their removal. The usual time for the gut sutures to remain is about three or four weeks. It is believed that by leaving them thus long, a somewhat thicker perineum may result from cicatricial deposit.

This operation is superior to the old methods of denudation and simple flap-splitting principally because in the latter, the sutured ends of the muscular structures are *not* reached, and consequently cannot be approximated, whereas in Tait's modified operation this object is reached with almost absolute certainty.

Cases in which the old method of superficial denudation has been employed, usually stretch out in time and become almost as bad as before, because the new perineum is composed mostly of skin and cellular tissue. With Tait's improved method this cannot occur, but quite the reverse, as the muscles, weakened by long disuse, now reunited, will become constantly stronger by use, and the perineum in consequence, thicker and firmer as time goes by. To illustrate: let us consider the anatomy of the parts involved with special reference to the action of the muscles entering into the perineal body when loosened by rupture of their aponeurotic attachment. First, we have the sphincter ani, coming from the coccyx and encircling the anus. When this muscle's attachment is loosened by the tearing asunder of the perineal body, it retracts toward the coccyx. The transversus perinei, on either side, retracts in like manner towards its origin, the inner side of the tuberosity of the ischium. The sphincter vaginae being also loosened from its moorings, shortens up towards the clitoris. Now, these muscles being more or less connected with each other by anastomosing muscular fasciculi, as well as by fragments of the torn perineal body, of course the torn ends tend to keep somewhat together in their usual relation, but the stronger sphincter ani acts to pull the whole mass backward toward the coccyx, and the transversus perinei, to either side. The fact of this retraction of muscles beneath the skin and cellular tissue is of very great importance as it gives a key to the selection of the best method of placing the sutures—especially the first one, which should be so passed as to embrace and bring together the torn and retracted ends of the sphincter ani. That the tissues do assume these abnormal relations to each other can be readily demonstrated in a recent case of rupture by gently separating the lips of the wound, while one finger is placed in the rectum, when the skin and cellular tissue will be seen to project for quite a distance beyond the torn muscular layer beneath; and as healing by granulation takes place, this space left by the retraction of the torn muscular fibers, is filled and smoothed over by cicatricial tissue and newly-formed mucous membrane over it. Hence in the old method of superficial denudation, this layer of cicatricial tissue is all that is approximated, the retracted ends of the muscles not having been reached by the suture, a skin perineum is the result. Hence great care is necessary in placing the suture which is to hold the end of the sphincter muscle in contact. It must be placed low down and well out *under* the skin as shown in cut No. 2. Skene in his excellent work on Diseases of Women makes this truthful statement. "The restoration of the function of the muscles is the great object of all surgical operations for the relief of those injuries of the pelvic floor. It matters not how much tissue may be gathered together and united in the region of the perineal body, it will have no functional action if destitute of muscular tissue." "The success of all surgical procedures depends upon the

restoration of the muscles, elastic tissue and fascia, and not the mere uniting of the tegumentary and areolar tissue." He further very truthfully says that "In this operation to restore the perineum, much surgical skill is necessary in order to succeed. This is necessary because union by first intention must be secured or else the operation will fail. In many operations in surgery the wound does not heal by first intention. Union may be secured by granulation and a perfect result obtained, but in the operation under consideration, if the whole or any part fails to unite promptly, partial or complete failure is the result."

The after treatment and other points such as the removal of the sutures will be brought out in the history and treatment of the following case, taken from my case book, and which gives an example of what can be accomplished by means of the split-flap operation in even extreme cases where we have as in this one, laceration of the pelvic floor, sphincter ani muscle and recto-vaginal septum, and complicated further by a bilateral laceration of the cervix uteri.

Case XLV. Mrs. H., banker's wife, general health good, married ten years, aged 30 years, three children, age of last, two years. Character of labors hard excepting the second. One miscarriage, one year since caused by a fall. Duration of present illness since birth of first child—quite common. Menstruation appeared at 15, and was regular, of normal amount, three to four days, character normal, slight pain. Symptoms none of special note till child-bearing began, then usual complaints. Leucorrhea, character normal as to amount, more or less constantly since first labor. No pruritus or vaginismus of any account. Physical examination, conjoined gave very little tenderness. Rectal touch revealed a recto-vaginal laceration extending two inches up . By vaginal touch cervix antiflexed and prolapsed, cervix hyperplastic and bi-lateral laceration. Cervix hard and enlarged. Pain at angle of laceration. Complete rupture of perineum. In this extreme case the laceration of the walls of the rectum and vagina extended up beyond the internal sphincter ani, and it was necessary to restore the septum before operating upon the perineum.

The patient had been properly prepared by baths, clearing of the bowels and shaving and scrubbing the pubes and other parts, and a bichloride pad had been worn for 24 hours; also vaginal douches had been given. I very properly began the operation by doing the urgently required trachelorrhaphy as follows: The patient was placed upon a table in Sim's position before a well-lighted window, having previously been anesthetized by ether in her bedroom by Dr. Bullard (and I am pleased to say that his method of giving ether is quite a success over old ways). A Sim's speculum was introduced and the vagina cleaned with antiseptic mop. A Skene's tenaculum forceps, curved upon the flat side, was fixed in the anterior half of the cervix, at a point which makes the lips of the os externum. The posterior half of the cervix was seized in the same way with a similar forceps, and the operator, taking a forceps in each hand, brought the two flaps together in order to see exactly where the parts were to be united The forceps which holds the anterior flap was then given to an assistant, while the one attached to the posterior flap was held in the left hand of the operator, and with the Skene hawk-bill scissors, the surfaces which were to be united were quickly denuded. The points of the hawk-bill scissors were made to cut out the cicatricial tissue or plug at the deep angle of the tear in cervix, the flaps were brought together by the aid of the forceps so as to bring the tissues

within proper grasp of the scissors. The other side was treated in like manner, and a flaxen thread was passed through the center of each lip and forceps removed for more room. After bleeding had been checked by hot water, the flaps were brought together by four silkworm-gut sutures on each side and carefully tied and cut short.

The operation for repair of the pelvic floor was then begun, and, as already stated, the chief object of all such operations should be to restore the muscles that have been injured; especially is this true of the sphincter ani, as it is the most difficult to restore and the results of failure are so fraught with ill to the patient, leaving her little better off than before the operation, and in order to obtain this important end the recto-vaginal septum was freshened at edges of tear and then closed by three silkworm-gut sutures, tied on the rectal side for future removal, careful endeavor being made to embrace the ends of the sphincter ani muscle and so coapt them properly. After the recto-vaginal septum had been thus closed, the perineal laceration was then done by the split-flap method, less the cross cut or first step as usually done, it was modified like the original Simpson—by denuding what should serve as the recto-vaginal space, and then with a sharp-pointed scissors, I made the flap-splitting cuts up in the line of the original tear in each labia majora, and extended as high as the white line of cicatrix reached, or a little beyond. I think it extended about 1½ inches from the edge of the repaired sphincter ani. Hemorrhage was then controlled by applying hot water, and, with a curved needle, eye at point, five silkworm-gut sutures were passed in such a way as to bring together the several ends of the remaining muscular fibers of sphincter, transversus perinei, levator ani and sphincter vaginae muscles. The sutures were passed very deep laterally so as to reach and drag into perfect coaptation those muscles, and, if need be, they should be first dissected up through the cicatricial tissue to so expose them that their ends may be brought together. A running suture of fine cat-gut was used to close the superficial edges of the wound.

On tying the sutures, one will note to his delightful surprise that the original perineum is rebuilt and much longer than anticipated.

The operation is now finished by cleaning the parts and dusting with iodoform, and applying a bichloride pad, bound on by a T bandage, and the knees held together by a broad band. I prefer to keep the bowels loose after the second or third day by means of Comp. ox gall tablets, and just before a movement, give an enema.

The chances of union by first intention are superior, I think, to the denudation operation, as the rectal and vaginal flaps divert secretions from the wound. Urine generally can be passed while patient lies on face, thus keeping the wound cleaner. The drawings I show here will, I hope, simplify what steps are proper in the operation and through the kindness of Dr. Jouch, I think they are quite correct.

I acknowledge with thanks the valuable information obtained in the preparation of this paper from the following sources: American System of Gynecology, The American Gynecological Journal, May and June, '93; The American Medical Journal, Sept. '94; also the following Text-boobs: Skene, Thomas, Munde, Emmet, Sajous's Annual, 1892.

119½ S. Spring St.

POLIOMYELITIS.*

BY F. R. BURNHAM, M.D. SAN DIEGO, CAL.

Poliomyelitis Anterior, or Infantile Spinal Paralysis has doubtless committed its ravages upon the children of the human family for ages. Its definite lesion, however, was not recognized till within a comparatively few years. It is quite probable that Mephibosheth the grandson of Israel's warrior king, suffered from this form of paralysis. A monograph by Jacob Van Hein appeared in 1840 clearly distinguishing this form of paralysis in children. As a clinical picture it cannot be improved upon, but he apparently only *suspected* a spinal lesion. In 1863 Rillist and Barthez published an autopsy in which both lower extremities were paralyzed, and they by means of the microscope, demonstrated that the ganglion-cells of the anterior gray horns, had undergone atrophy and degeneration. Later these pathological data were confirmed by Charcot, Joffey and others. It is now definitely settled that the lesion is in the gray matter of the anterior horn of the spine.

On the 19th day of December, 1893, I was called to see H. M., aged 18 months, a strong, healthy child, of good parentage. There are four older children in the family, all healthy. I was present at the birth of the child, and had seen her frequently up to the time of her illness. She had had no illness to speak of before this, and always had the best of care and nourishment. She had begun to walk at about fourteen months, and was strong upon her feet. Upon my first visit I found her getting about the room by means of a chair. She could bear but little weight upon the left leg. The foot was adducted, slightly extended, and was dragged when she moved forward, by the aid of a chair. The parents had noticed her difficulty in walking two or three days previously. I made a careful examination for hip-joint disease, but soon found there was no trouble there. The right knee was slightly swollen and tender. The gums were also deeply congested, with teeth not yet erupted. I diagnosed rheumatism and prescribed salicylate of soda, and a solution of cocaine for the gums. No history of a fall could be found. She had been under the care of a truthful nurse, and the mother was with her much of the time. There had been no noticeable fever within two or three weeks. No cause was assigned by the parents.

Soon after, I was taken sick, and the case passed into the hands of Dr. F. Baker, to whom I am indebted for the subsequent history up to March 16th. Dr. Fred. Baker's report: "Was called Jan. 15th. found the child much depressed, pulse irritable, no fever, pain was evident on motion of legs, active or passive. Gums much swollen and congested. Later in the day evidences of depression disappeared, almost entirely. Right knee swollen and red, suggestive of rheumatic fever, very painful. Temperature normal. At second visit gave small doses of phenacetine and salol. Apparent improvement for two days, which we credited to medicine. Then relapse in spite of medicine, which we decided was inoperative, and discontinued. About Jan. 22nd, broke out with chicken-pox which pursued a normal course. Depression and sore mouth followed. About Jan. 27th, Dr. R. J. Gregg was called in consultation. At this time gentle massage was tried. The first application was well borne, but upon second application the child went into a condition very suggestive of collapse, evidently from pain in the legs.

*Read at the Fourteenth Semi-Annual Meeting of the Southern California Medical Society held at Pasadena and Echo Mountain, December 5 and 6, 1894.

At this time she was in a very irritable state, and the most gentle handling seemed to cause much suffering. This hyperesthesia of the skin was characteristic of the case till very marked improvement had taken place. An electrical test of the muscles and nerves was now made, with the faradic current, with varying results The flexors of the left leg responded slowly to a strong current. The extensors very slightly. Of the right, could get no positive reaction from any group of extensors below the thigh. The flexors responded sluggishly. Owing to the pain caused, and the age of the child, the examination could not be very accurately made. The paralysis was confined to the lower extremities. During all of this time the child's intellect was bright and clear as ever She did not sleep well much of the time, and bromides in small doses were given when necessary. The circulation was poor, and the lower extremities tended to a lowered temperature. Begun regular daily applications of the faradic current about Feb. 8th, with slow interruptions, from forty to sixty to the minute, to both legs. About Feb. 20th, again tried massage which was not borne, but the child made steady progress. About Mar. 15th, she was able to lift the left heel from the bed, when lying on her back, and about ten days later, did the same with the right heel. From that time, progress was steady. From the first the child was very irritable, and bore strangers badly, till about the end of February. The faradic current if not too strong, was always submitted to without complaint, and much of the time seemed to be soothing. Massage was begun about this time by a skillful nurse, and well borne." The muscles which had become atrophied considerably improved under the manipulation quite rapidly.

The case now returned to my hands at the request of Dr. Baker. I found the child able to kick her feet and legs very freely. The massage and electricity were continued. The nurse was requested to begin to let the child bear a little weight on her feet. I then had a wheel crutch made, that would allow her to bear a little weight, and by lowering it, more; she soon threw it away and began to walk alone. For more than eight months she has been running about as freely as before her illness—not a vestige of the paralysis is left. This case was of the subacute variety, being much slower in its development than the acute.

The etiology of this form of paralysis is obscure. It occurs most frequently in children from one to three years of age. Children in the most robust health are quite as subject to infantile spinal paralysis, as the weakly. A child to all appearances in perfect health, may in twenty-four hours be unable to move from the prone position. This has been called teething paralysis, and the eruption of the first teeth is undoubtedly in many cases an exciting cause. In some cases it would seem to be the chief cause. We can say with certainty that the excessively irritable condition into which the system is thrown during this period, predisposes to spinal paralysis, as it does to all of the neuroses. How frequent is tetanus and eclampsia at this time. Doubtless the ganglion cells of the anterior horns take part in the congestion attendant on this condition, and from this condition it is but a step to inflammation. When we consider how active the motor areas are in a child, we have a plausible reason for the development of acute poliomyelitis anterior. As to the febrile condition, it is a question, whether it is a cause or effect. Many cases have no fever. Sitting down on damp grass or cold stone steps are given as causes. Whorton Sinkler has given hot weather as a cause; certainly most cases occur during the hot season. Acute

febrile diseases are assigned as a cause. Inherited tendency to paralysis, convulsions, insanity, etc. One of the earliest symptoms is fever reaching 103 or 104 F., and subsiding within twenty-four to forty-eight hours. Yet there may be no fever whatever. This may be accompanied by convulsions and diarrhea. This is followed in a few hours by paralysis, more or less extensive, and quickly completing its invasion. The lower extremities most frequently suffer. We may have both legs, one leg and arm, on same side or on opposite sides. The face muscles, eyes, ears, mouth, larynx and sphincters, are almost never affected. Of the groups of muscles, the flexors are most frequently affected. Hyperesthesia of the skin exists. Our little patient cried with the most gentle handling, yet the spine is not affected, as in Pott's disease. Within forty-eight hours in some cases, and in a few weeks in others, regression sets in. That is, certain groups, or single muscles, begin to assume their normal function. This is one of the distinguishing features of the disease. Sometimes entire muscles or groups recover in this way, but most frequently only improvement is visible, and this only in part of the muscles. This process may continue for six months, but if regression does not begin within this time, permanent paralysis may be expected. At the end of two or three weeks, muscles not improving begin to atrophy. They diminish in size in all directions, and component parts. The blood vessels lose their muscular coats, they diminish in size, less blood reaches the parts. The skin gets cold and marbled in appearance, and becomes adherent to the cellular tissues beneath. The temperature is reduced two or three degrees. Dr. Sinkler reports a case in which there was a difference of ten degrees, viz.: 74 degrees, and 84 degrees F. The bones diminish in size, growth is stopped, so they appear to shorten. The ligaments shrink, so that subluxation occurs in joints like the shoulder, giving undue prominence, to all the invaded joints. Most conspicuous among the deformities arising from this cause is club-foot. This is supposed to arise from the unopposed pull of the healthy muscles. The healthy muscles in time become permanently shortened, and the deformity is fixed. We may also have curvature of the spine from the shortened leg.

When called to a case where this disease is suspected, let the patient walk: notice how he uses his feet and legs, what power he has over them, how they rest on the floor. Is there present adduction, abduction, or talipes? If unable to walk, let him lift the legs, or flex and extend the feet and legs. If too young for this, move them yourself, and see if they have the tonic condition which exists in the healthy muscles of a child, or do they drop without resistance. We have spoken of the muscles as undergoing degeneration, atrophy. This condition does not arise in all cases of paralysis. In cerebral paralysis, while the nerves and muscles are deprived of motion, they show no marked rapid atrophy. The ganglia of the anterior horns of the spine seem to possess not only motor power over the nerves passing through them but also a trophic influence. When this trophic influence is cut off, as in the case of poliomyelitis anterior, the muscles not only lose their normal function, but also structure. This degenerative atrophy is one of the distinguishing features of this form of paralysis. One of our most reliable means of diagnosis in acute poliomyelitis is by electricity; both currents are used in this examination. We subject the diseased nerves and muscles to an electric current of a given strength, and note the excitability or reaction, and where it is possible, compare it with the healthy side. The reaction to electric currents, passed through nerves or muscles, enables us

to distinguish between paralysis from nerve trunk, and anterior horn lesions. After four or five weeks in infantile spinal paralysis, we find the muscles react to the faradic current but slowly, and in a short time entirely cease. The galvanic still produces a reaction, but it is slow and wavering. When passing the electric current through healthy muscles, we get a stronger reaction, when closing with the negative, than with the positive, we express it thus: K. C. C.) A. C. C. The opening contraction will be A. O. C.) K. O. C. In this form of paralysis the reaction is changed to read K. C. C. (A. C. C., and the opening to A. O. C. (K. O. C. This is designated as qualitative change. Now, when we test healthy muscles, and find a given strength brings about a sharp contraction, and to get the same result in a paralyzed muscle, requires a much stronger current, we call this reaction quantitative change. These quantitative and qualitative changes with loss or greatly diminished faradic reaction, make what is known as the *reaction* of *degeneration.* This reaction can only occur in anterior horn, or bulbar paralysis, and it is therefore a strong diagnostic point. Suppose a case is before us, we say: is this cerebral, spinal or peripheral? If cerebral, the reflex will be exaggerated, it is lost in poliomyelitis; there will be no reaction of degeneration; there is usually loss of sensibility, which is increased in this form: clouded intellect, which is clear and active in infantile spinal paralysis; no early rapid atrophy, or diminished temperature. The facial muscles will be involved in cerebral paralysis. In transverse myelitis we have paralysis of sensation and motion, and the sphincters, no regression, and long continued fever. In diphtheria we have the preceding disease and the involving of the muscles of the throat and palate. It should be distinguished from hip-joint disease by careful examination of the physical condition.

In the treatment of infantile spinal paralysis, much depends upon nursing and favorable surroundings. The child is fretful, and must have constant skillful care; all sources of annoyance must be removed. If the gums are swollen and much congested, scarify and apply sedatives. Clear out the intestinal tract, to remove worms, or other possible irritation. Regulate the diet to avoid indigestion, keep the paralyzed limbs warmly covered, and, by artificial heat keep the temperature normal. Counter-irritation to the spine, and ergot, to limit the inflammation to the ganglionic cells. It is to electricity, however, that we look for the best results. Both currents are employed. Apply central galvanic to the cord by placing a large electrode over the seat of the disease, and the other at the other extremity of the spine, using a strong current. We also apply the electric current directly to the paralyzed nerves and muscles, one electrode being placed on the muscle and the other indefinitely. If the faradic will produce contraction, use it with slow interruptions. If not, the galvanic, also with slow interruptions. This must be persisted in, for many muscles recover, when apparently entirely lost. Massage should be employed from the first. As to the treatment of deformities, many can be prevented by properly applied apparatus. Tenotomy, or stretching, according to the case. Get the child early on to a wheel crutch, and keep in fresh, open air as much as possible.

The date of the Medical Examiners' meeting to which we called the attention of our readers last month has been changed to January 31st.

GENERAL PERITONITIS CAUSED BY A TWISTED PEDICLE OF AN OVARIAN DERMOID RELIEVED BY ITS REMOVAL, AND TWO WEEKS LATER SECONDARY OPERATION FOR INTESTINAL OBSTRUCTION WITH RECOVERY.*

BY J. F. COWLES, M. D., LOS ANGELES.

Mrs. E. O. W., aged 27, native of Tennessee, married 4 years, lost a four-months foetus during the first year of married life. Mother of one child, two and a half years of age, in labor 18 hours, but had a comparatively easy time and a good convalescence, feeling well afterwards.

So far as she knew there was no history of tumor on either the paternal or maternal side of her family.

Eighteen months ago she first noticed a tumor about the size of an orange on her left side. It was freely movable and she could carry it from side to side. It was not sensitive but she had considerable pain at times, always on the left side and at irregular intervals and most often after considerable exercise. Was generally nauseated when the pain was present. The tumor rapidly increased in size attended with nausea and vomiting to such an extent that the patient had to be nourished by nutrient enemas to support life. Fever running as high as 104 degrees F., with a wiry, rapid pulse indicated too surely the presence of general peritonitis. The case was so unpromising and the patient so low, that one of our best and most experienced Los Angeles surgeons, who saw her, was declared to have said that an abdominal section was out of the question, as she would certainly die on the table. On November 21st, '93, three or four weeks after she was first taken, I saw her with Dr. Kuster, her attending physician. Although of large frame, I do not think she would have weighed over 85 or 90 pounds, being little more than skin and bones. Her pulse was 110, and temperature 101 degrees F. The tumor which was in the median line, and fixed, appeared to be about the size of a new-born babe's head and reached to the umbilicus. The abdominal walls would not glide over it and had that peculiar mottled and almost livid color, betokening subacute inflammation in their substance. Bimanual examination outlined the uterus of normal size, lying under and below this mass, and sufficiently movable, as to convince me that it was not a uterine tumor. Therefore my diagnosis was that we had to deal with some kind of ovarian tumor and general peritonitis, with probably causative relation existing between them. I am free to confess that I did not suspect at the time a twisted pedicle, as the history of the case, was not nearly so pointed and lucid, as I afterwards got it. The condition of the patient was so bad, that it was deemed best to specially nourish her for a few days before submitting her to so serious an operation as seemed urgently demanded. After a week's preparation—at my sanitarium and with the distinct understanding with her husband and mother, that it was her only chance to get well and that even with the operation, her chances for recoverry were as one to ninety-nine, did I consent to operate. They eagerly seized the chance and urged operation.

Accordingly on Dec. 2nd, '93, at 9 A. M., after the usual aseptic and antiseptic precautions had been taken in regard to patient, operating room, operator, and assistants, with the aid of Drs. Ainsworth, Bicknell, Bryant, Kuster, Lasher, Moore and Smith, and in the presence of several other physicians, I

* Read before the Fourteenth Semi-Annual meeting of the Southern California Medical Society held at Pasadena and Echo Mountain, Dec. 5 and 6, 1894.

opened the abdomen in the median line to the extent of four or five inches—being obliged finally to lengthen it to nine inches. On account of the adhesions between the tumor and abdominal walls, the incision had to be extended above the umbilicus and access had to the tumor from behind. It was literally peeled off from the abdominal walls in front and the intestines behind, when it was found to be a semi-gangrenous dermoid cyst of the left ovary, with a large pedicle four or five inches long and strangulated by a twist in the upper two-thirds of its length. A stout ligature of braided aseptic silk was thrown around the lower healthy portion of the pedicle and securely tied and all the unhealthy tissue removed and several white looking chains of micro-organisms, which Dr. Lasher pronounced streptococci pyogenes albi, were scraped away and their site disinfected. The peritoneal edges were brought together by a continued catgut suture and the abdominal wound closed by interrupted silkworm-gut sutures, after leaving in a piece of aseptic gauze for drainage. A combined dressing completed the toilet and the patient was put to bed and surrounded with hot bottles and given hypodermics of strychnia and atropia until reaction was established. She was fed by rectum for the next four days, the bowels being left otherwise undisturbed. Twenty-seven hours after the operation, the gauze was removed and a drainage tube inserted. The patient looked worse at this time if possible, than at any other, due in large measure, I suppose, to the immense amount of serum—a quart or more, drained off by means of the gauze. On the fourth day, the wound was redressed and the drainage tube removed, as the parts looked healthy and there was little or no discharge. A dose of epsom salts was also given at this time and acted twice slightly, seeming to cause also a return of the vomiting. By means of warm water enemas, the bowels continued to move a little once each day, for the next four days. Yet I very much doubt, in the light of subsequent events, if it were anything more than a clearing out of the large intestine.

A number of the members of this Society may recall that, on the second day's session at the Westminster Hotel last December, I exhibited the specimen removed from this case but a few days before, with a few explanatory remarks. I then stated that I would report further progress of the case, whether she lived or died. I further said that I more than all else feared obstruction of the bowels, and I based my fear on the insufficiency of the stools and the vomiting at intervals. Suggestions were called for and only one was offered and that was to try the subcutaneous injection of epsom salts, as the suggestor had read of its good effects in certain similar cases. I tried it repeatedly in combination with strychnia, but with no apparent effect. Finally, on the evening of Dec. 16th, she began vomiting, almost incessantly, liquid faeces and seemed on the verge of collapse. Preparations were hurriedly made and early on the morning of the 17th, with a few of the former assistants, I opened up the old wound, but there was no obstruction in sight and everything looked well except a gelatinous substance at the site of the former site of the streptococci, which was removed and drainage again inserted. As the abdomen above the navel seemed more tympanitic than elsewhere, I opened it up to the extent of three or four inches. Several coils of small intestine literally jumped out, so great was the tension within.

On pulling out a yard or so of the small intestine I came upon a loop surrounding a coil of intestine somewhat after the fashion of the first step in making a knot. Careful traction was made upon it, until it was somewhat loosened, but not to the entire satisfaction of all concerned, but fearing to

prolong the operation too much, the wound was closed and dressed as before and the patient treated as already described to bring about reaction. That afternoon the bowels moved twice, with expulsion of large quantities of gas and the next day again quite copiously. They continued to move every day, until the patient left the sanitarium, Jan. 7th, '94. Her recovery, while slow, was uninterrupted and very satisfactory, and a few months afterwards she weighed 135 pounds, which weight she still carries and looks the picture of health, and yesterday declared that she had never had better health than since she left the sanitarium.

There are several points suggested by this case. First, that dermoids of the ovary frequently have long pedicles and on that account may float out of the way and give no trouble during labor—yet this very length of pedicle is a constant menace on account of its liability to become twisted. Of half a dozen cases of ovarian dermoids that I have seen, four have had long pedicles: Therefore a dermoid of the ovary should be removed as soon as possible after its recognition.

Second, wherever there is a history of sudden enlargement of a tumor, especially if accompanied with nausea, pain and symptoms of collapse and later, rise of temperature, a twisted pedicle should be suspected: Therefore a very careful inquiry into the history of the case is important, as the sooner a case of the kind is operated upon the better for both patient and doctor.

Third, sometimes apparently hopeless cases may be saved by operative interference, and it therefore becomes the duty of the surgeon to operate, if a proper division of responsibility can be had and there is the slightest chance of success.

Pacific Sanitarium, Pico and Hope Sts., Los Angeles.

A PROGNOSTIC FEATURE OBSERVED IN BUT NOT CONFINED TO SOUTHERN CALIFORNIA.*

BY CEPHAS L. BARD, M.D., VENTURA, CAL.

"In the pursuit of medical knowledge, let me advise you to converse with nurses and old women. They will often suggest facts in the history and cure of diseases which have escaped the most sagacious observers of Nature. By so doing, you may discover laws of the animal economy which have no place in our system of nosology or in our theories of physics." This prefatory admonition of our honored Rush must be supplemented by an entomological reference before presenting the subject proper of this paper.

Of all the blood-sucking parasites which attack the encasement of the human body, none is so familiar to us as the pulex irritans or common flea. More abundant in Europe than America, it is, owing to the peculiarity of climate and soil, quite numerous in California. Its diminutive body contains an amount of intelligence vastly superior, in proportion to its size, to that in the huge form of the sagacious elephant. Of the insectivora it is the most susceptible to domestication. It is the smallest living thing which has been made subservient to the will of man. The wonderful performances of birds and animals under the skillful hand of the trainer are equalled, if not surpassed by the extraordinary feats of this wingless fly. It has been successfully taught to drive and pull coaches; to go through the manual

*Read at the Fourteenth Semi-Annual Meeting of the Southern California Medical Society held at Pasadena and Echo Mountain, December 5 and 6, 1894.

of arms; to fire cannon; to play on the violin; all of the articles being adapted in size to the minuteness of the operator. Unlike other vermin, they are epicurean, exhibiting a decided preference for the obese and corpulent and avoiding the lean and lank. That they will not touch a corpse has been known for years and many references are made to the fact by early writers. They are never found in the morgue and the hunter can not fail to notice their hasty exodus from the bodies of infested animals which have fallen victims to his skill. Some years ago, an old nurse at the bedside of one of my patients made the assertion, which was forcibly emphasized by the energetic puffing of her corn-cob pipe that fleas would not "torment" any one who was very ill. Her novel remark, like that of Jenner's milkmaid, fell upon an attentive ear and I was not slow in placing under observation the phenomenon so positively described.

As a result, I am now prepared to sustain and corroborate the statement of the observant but septic dame. Repeatedly, I have noticed in cases of prolonged illness, due to typhoid fever, pneumonia, etc., occurring where fleas abound, that the patient during the height of the disease was exempt from their depredations whilst the attendants were excessively annoyed.

My observations have revealed some additional features which in a prognostic point of view may not only be interesting but actually useful to those practicing in flea-infected localities. Present at the inception of an acute disease, absent at its height, a sure indication of its subsidence is their return. A single flea is often the herald of a favorable change which has not as yet been clearly manifested by a lowered pulse, a reduced temperature, and moistening of the tongue and skin. Convalescence is assured by their presence in numbers and a relapse is surely foretold by their subsequent disappearance. In fact, I am quite prepared to say that considerable reliance can be placed in this occurrence, unsupported by other objective symptoms, as a prognostic element and worthy of consideration.

One of the most interesting articles on the Chinese-Japanese-Korean question that has so far appeared, will be found in the February Overland Monthly under the caption, "The Mongol Triad," by the Editor of the N. Y. Journalist and wife of ex-Consul Fales of Amoy, China. The author treats of the history of the three Mongolian races and shows the causes that led up to the present complication with clearness and distinctness that is refreshing.

A charmigly written and illustrated sketch will be E. W. Wooster's story of a California outing up the Salmon River, "Pine Boughs." It reveals a paradise of game for the sportsman. In the interesting series of articles on "Ship Building in California," Captain John G. North's narrative of his early attempts toward building up a merchant marine on this Coast, is a welcome addition. In the "True Tales from the Old West," Chauncey L. Canfield contributes "An Argonautic Episode." The truthfulness of every one of this remarkable chain of early day experiences is vouched for by the Editor and Author.

Mr. W. H. Mills will have an essay on "Money and Banking," and G. C. K. Thompson a fully illustrated record of "The Wild Flowers of Hawaii." Alfred Holman will have something to say regarding "Oregonian Characteristics." Among the stories is a Mormon story by Alvah Milton Kerr and one by Frank Norris. In his department, "As Talked in the Sanctum," Mr. Wildman discusses the Napoleonic craze.

SELECTED.

DEPARTMENT OF SURGERY.

UNDER THE CHARGE OF JOS. KURTZ, M.D., PROFESSOR OF CLINICAL SURGERY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA, AND CARL KURTZ, M.D.

RETENTION CYST OF THE PANCREAS.—By Dr. Joseph Kurtz.—October 6th, 1893, Charles Borden, aged 12 years, was admitted to the County hospital after having been treated for about five weeks by Dr. Groton of Rivera, to whom I am indebted for the following history of the case:

About five weeks previous to his admission to the hospital, the boy fell from a tree upon a wash-wringer, upon which he struck with his abdomen. Soon after the occurrence he was seen by Dr. Groton, who, on close examination, found no marks of contusion or any other visible lesion, but the child felt great pain over the whole abdomen and was exceedingly tender in the epigastric region and very much nauseated. Opiates were resorted to which greatly relieved the boy; on account of vomiting, Dr. G. added bismuth subnitrate and in about a week the patient was apparently convalescing. However, after four days more he began to complain again of vomiting, pain and some diarrhea, which in spite of further treatment persisted and was only temporarily relieved by opiates. Perhaps sixteen or eighteen days after the accident Dr. G. discovered a swelling in the epigastric region, which increased rapidly and added to the symptoms present those of pressure. In but a few days more the tumor presented itself very prominently, about the size of a child's head at birth and one could feel fluctuation. Dr. Rowley of Downey, was now called in consultation and both gentlemen concluded to aspirate; this was done and as a clear liquid was withdrawn, it was followed by the introduction of a trocar with which the tumor was completely emptied, about one and one-half pints of a light brown liquid having been removed. This operation relieved the boy very much, but after a few days the old symptoms began anew and in about one week more the cyst had filled again and the trocar was again used to remove about the same amount of fluid. As this second operation was followed by no better results than the first one and I happened to be in Rivera soon after, I was consulted by Dr. Groton in regard to the case and I suggested the removal of the child to the County hospital, as his home care was not of the best anl I thought a laparotomy would have to be performed. October 6th, the child arrived. On examination I found the following symptoms:

He was much depressed, emaciated, tongue red, skin dry and sallow, pulse quick and about 120, irregular, temperature 102 deg. F. He vomited frequently and complained of radiating pain in stomach and bowels. On inspection of the abdomen a tumor was plainly seen and felt, about the size of a baby's head, in the epigastric and left hypochondriac regions, with greatest prominence about two inches to the left of the median line, reaching from a little below the ensiform cartilage about three inches downwards. The tumor was round, fluctuating and dull on percussion, and changed its position with the acts of inspiration and expiration. The feces were soft, but showed nothing particularly abnormal, the urine was normal. The dull percussion sound reached from the tumor to over the liver. The fluid

removed by Dr. G., had not been analyzed, but I did not like to inflict another puncture, not even with the hypodermic syringe, for fear of impending peritonitis. However, the removal of the liquid proved the fact that I had to deal with a cyst, as the tumor had developed and refilled so rapidly after repeated puncturing. I concluded that it must be a retention-cyst, probably of the pancreas, due to the traumatism, and at once suggested an operation to which the father of the child consented and which was performed on October 8th.

An incision was made about two inches to the left of the median line, parallel with the rectus muscle, over the greatest prominence of the tumor, beginning a little below the zyphoid cartilage, about four inches downwards, and the peritoneal cavity opened the whole length; the tumor came soon in view, but covered in the greater part by the stomach, which was closely adherent to it, the trocar having repeatedly passed through it into the cyst; the tumor was partly covered by omentum. In order to get away from those adhesions a transverse incision was added from the middle of the first incision about two inches to the left; the omentum could now be pushed aside and the tumor drawn into the wound, with a view of fastening it there. But as the cyst-wall was very thin and the cyst itself very tense, this was opened before sewing it into the wound, and about twenty to twenty-four ounces of liquid removed, which appeared first as a clear, light brown, and toward the last as a thick, almost gelatinous fluid. After this the cyst was washed out thoroughly with a mild antiseptic lotion and then explored with the fingers which evidently passed into the tail of the pancreas. The cyst was now carefully stitched to the peritoneum and muscles and skin of the abdominal wound, in order to give free drainage to any further secretions; the cyst was filled with iodoform gauze, which was used as the drainage material. The rest of the wound was closed in the usual way and an iodoform gauze and absorbent cotton dressing applied.

For about a week after the operation the temperature continued elevated—100 to 102 deg. F., also the pulse accelerated—100 to 110, quick, the stomach very irritable, in fact we evidently had to deal with a mild form of localized peritonitis, which I attributed to the punctures through the stomach; these symptoms were, however, not as severe as before the operation. The secretion of the cyst during the first week was also very annoying, causing maceration of the skin about the wound (due to the digestive power of the pancreatic fluid); this obliged me to change the dressing daily.

October 15, the temperature was normal, pulse 100, vomiting had ceased, no pain, and the secretion very much diminished, so that the dressing from now on was changed only twice a week, and from this time, the boy made an uninterrupted recovery. The sutures were removed between October 15th and 20th; the fistula itself was closed and dried perfectly about the 7th of November, and the boy went home November 12th, in good health.

There are some points of interest in connection with this case which I think worth mentioning:

1. The extremely rapid development of the cyst after the injury; and the rapid refilling of the same after puncturing it was evidently due to a laceration of the Wirsung's duct, perhaps in the middle of the pancreas, speedily followed by cicatrization, which cut off a great part of the duct from its outlet.

2. The repeated punctures of the cyst through the stomach with a trocar we should certainly expect to be followed by very grave results, but the symptoms here were such as we might naturally expect in any case of such an injury as the boy first sustained.

3. The boy is now (January 12th, 1895,) in perfect health, his digestion is not impaired and although the incision was not in the median line and even a transverse incision added to the vertical one, there is not the slightest sign of ventral hernia.

147 S. Main St.

DEPARTMENT OF MEDICINE.

UNDER THE CHARGE OF DRS. F. D. AND ROSE T. BULLARD.

A NEW METHOD OF TREATMENT IN PERNICIOUS ANEMIA.—Prof. I. N. Danforth of Chicago, gives in The Chicago Clinical Review, Oct., 1894, an interesting paper on pernicious anemia. His wife was a victim of this disease and steadily failed under the most approved treatment. The leucocytes counted one to forty hematocytes; the hemaglobin fell to thirty-five per cent. The pulse had practically no tension; the superficial veins were collapsed; anemic murmurs were heard; the skin assumed that ominous lemon-tint, and lost its normal tonicity or elasticity; digestion failed and obstinate nausea set in; recovery hardly seemed possible.

In this emergency, he saw a notice of the paper of Prof. Frazer of Edinburgh, read in Rome, on the "Effects of Bone Marrow in Pernicious Anemia," (London Lancet, Apr. 7, 1894). He determined to give the remedy a trial and procured a section of the femur of an ox and administered the marrow in large capsules, three or four a day. They were well borne, exciting no gastric irritation, which was more than could be said of any other remedy tried. The red marrow was used as it possesses the greatest blood-making power.

In order to extract the marrow from the cancellated tissue and get it into palatable form, he took the anterior extremity of calves' ribs (perhaps the first six inches) and broke them so as to thoroughly expose the cancellated tissue. These fragments were placed in a jar, with enough glycerine to rather more than cover the broken bone. During the process of maceration, lasting three or four days, it was stirred occasionally. The glycerine extract, was then strained off through flannel and the result was a reddish syrupy liquid, with no pronounced odor and little modification of the ordinary sweetish taste of the solvent. This was given in teaspoonful doses three times a day with five drops of Fowler's solution of arsenic. It was easily taken, well borne and the patient gained progressively and rapidly. In a few days she complained of the sweetish, sickly taste and the stomach began to show signs of rebellion.

After some experimentation he decided on following formula:

R. Liq- Potass, Arsenitis (Squibbs).....drms ijss.
Horsford's Acid Phosphate,.....oz. iij.
Ext. Bone Marrow, ad. ft.....oz. viii.
Sig. Dessert spoonful after each meal.

This has been perfectly satisfactory, and the patient has steadily gained in health.

About the middle of July, Dr. Frank Johnson, found the hemoglobin increased to 80 per cent.; the hematocytes were not counted. In a microscopic field, however, there was no apparent increase of the leucocytes, and the hematocytes seemed perfect in all regards.

Prof. Frazer gave two or three ounces of raw beef marrow, (from the long bones) daily, and the result was apparently a complete recovery in three months. Prof. Danforth thinks clinical experience will demonstrate that his preparation will suit the greater number of patients because it contains the hemogenetic factors of the red marrow; because it is not likely to offend a delicate stomach; and because it is easily and rapidly assimilable.

THE STRYCHNINE TREATMENT OF PULMONARY CONSUMPTION.—Next to rest and food, strychnine in large doses is the most important agent in the treatment of this disease. Begin with one thirty-second of a grain and gradually increase to one-sixteenth, one-tenth, or one-sixth of a grain or even larger doses, given four times a day. According to some authors it does not produce albuminuria or diabetes as is generally supposed. It alleviates the loss of appetite, the vomiting, the constipation, the nervousness and sleeplessness, the pain in the chest, the cough and expectoration, the dyspnea, the weakness of the heart, and acts as a blood-builder in an eminent degree. Its usefulness rests, of course, on its influence over the nervous system, and is another link in the chain of evidence which shows that in the great majority of cases, pulmonary consumption is the direct result of primary diseases of the pulmonary nervous supply.—Coll. and Clin. Record.

INTRA-VENOUS SALINE INJECTIONS IN UREMIC COMA.—Dr. C. F. Parker (Medical Record) reports that at the Chambers Street Hospital, New York, this method of treatment is used in all subjects of uremic coma, and found to answer better than any other. If the patient is plethoric, it is supplemented by the taking of blood from the other arm. The injection is made into one of the veins at the bend of the elbow, one or two quarts of the saline being used.—Med. and Surg. Reporter.

DIETETIC TREATMENT OF PATIENTS THREATENED WITH CEREBRAL HEMORRHAGE.—Dr. Joseph Collins, in "Food": The diet for these patients, varying as it must with individuals and their digestive peculiarities, should be mainly of carbohydrates, sparingly of hydrocarbons, and still more sparingly of nitrogenous food stuffs. The essential points to remember about the latter two are, that the first is given as an energy producer and as an aid in the complete oxidation of other food stuffs, and that when the last is administered it should be seen that its complete oxidation is thoroughly performed. So much for the administration of the organic food stuffs. A word concerning the inorganic. Water, particularly is necessary. The important part played by water in the treatment of arterial degenerations, particularly when dependent upon improper and insufficient metabolism, is not easily overestimated. The presence of it in the digestive tract, influencing as it does, the rapidity of osmosis, filtration and the other principles involved in absorption and its effect in lowering the specific gravity of the blood after it is absorbed, are both very important, not to speak of its being the vehicle for the removal of most of the effete matters from the system. It favors absorption, facilitates oxidation and promotes thorough metabolism. In all cases of arterial degeneration, with threatened cerebral apoplexy, water should be given in small quantities, frequently repeated, and should thus become a staple part of the diet.—New York Med. Times.

NUCLEIN AS A CURE FOR CONSUMPTION.—Dr. Victor C. Vaughan of the Michigan University, has concluded from a long series of experiments that the substances in the blood plasma known as nucleins, have a direct resisting influence upon the germs which produce consumption. It has long been known that there were germ-destroying substances in the animal organism, and Dr. Vaughan has demonstrated these substances to be the nucleins. Dr. Vaughan is one of the foremost investigators in this country, and while his experiments will have to be repeated by others, weighed, tested and doubted, they point in the right direction, and should be treated in all fairness by the profession. His methods are open to the world and it is to be hoped that a great stride forward has been taken.—Texas Sanitarian.

NERVOUS AND MENTAL DISEASES.

UNDER THE CHARGE OF H. G. BRAINERD, A.B., M.D., PROFESSOR OF MENTAL AND NERVOUS DISEASES, COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA.

LOCALIZATION OF SENSATIONS.—(Journal of Nervous and Mental Diseases.) Dr. Chas. L. Dana says: The skin-muscular sensations stored up as memories regulate the voluntary and automatic movements just as the word-memories regulate the organs of articulation. In cortical lesions there is, then, a skin and muscular "amnesia," and the patient with a cortical lesion is practically a case of motor-amnesia, so far as localization and certain purposeful movements in the affected part are concerned. The application of the same psychology to the central convolutions that is applied to that of Broca, solves, it seems to me, the much-mooted question of the motor-cortex and its functions.

The muscular sensations have their cortical representation, probably in the parietal lobule and its neighborhood. But the awkwardness and fumbling movements in lesions of the central convolutions can be explained by the view I have suggested, that muscular memories or association processes are represented measurably, at least, in the motor area.

INSANITY FROM ALCOHOL.—In a recent special report of the Lunacy Inspectors of Ireland, the opinions of the medical superintendents of the district asylums are given, as regards alcoholic intemperance as a cause of insanity. Twenty out of twenty-two agree in making it, after heredity, the most prevalent cause. The proportions estimated of insanity due to alcohol varied from 10 to 35 per cent. of the total admission.

Two superintendents call special attention to transformed inebriate transmission, i. e., the insanity of children of intemperate parents, who are the victims of various neurotic disorders, insanity and epilepsy in particular.—Amer. Jour. Insanity, Oct. 1894.

TRAUMATIC TETANUS TREATED WITH TIZZONI'S ANTITOXINE—RECOVERY.—ByH. L. Evans, M. D. (Brit. Med. Jour., Sept. 15, '94.) A boy of 13 years fell in the road, cutting his knee, getting dirt in the wound at the time; five weeks later began to have pain and stiffness in back and shoulders. In the next few days, opisthotonos, trismus and spasms became marked in spite of free incision and disinfection of the wound in knee, and the liberal administration or chloral and bromides. Twelve minims of Tizzoni's Tetanus Antitoxine were injected under the skin of the abdomen. The temperature

dropped in two hours from 99.8 degrees to normal. The injection was given at 7 p. m., and the following day the spasms were less severe; the opisthotonos much diminished and the mouth could be readily opened. Improvement continued steadily for three days when slight spasms returned at frequent intervals. Six more injections of antitoxine were made in close succession which caused a fall of temperature to 96.6 degrees and stopped the spasms which did not again return. Two more injections were given a few days later to insure the continuance of the convalescence.

The amount of antitoxine used in all the injections was about seventy minims. The recovery was rapid and complete.

OBSTETRICS AND GYNECOLOGY.

UNDER THE CHARGE OF WALTER LINDLEY, M.D., ASSOCIATE PROFESSOR OF GYNECOLOGY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA.

TRENDELENBURG POSITION.—In the Transactions of the American Association of Obstetricians and Gynecologists, as reported in The American Journal of Obstetrics, Dr. J. D. Griffith of Kansas City, Missouri, said: "I put myself in the Trendelenburg position for thirty minutes, and if any of you will try it for a short time, even without the anesthetic shock added to it, you will find marked shock in this position. The Trendelenburg position is an exceedingly disagreeable one. I did not recover from it in less than two and a half hours."

Dr. E. W. Cushing of Boston, said: "In regard to the Trendelenburg position, I acknowledge the danger, especially if the patient is let down suddenly. Patients must be let down slowly. I wish also to say that if you have to do with the removal of a cancer through the abdomen, the increased danger of infection without the Trendelenburg position is sufficient to justify its use, even if there is some increased danger of shock in letting the patient down.

PELVIC MASSAGE IN GYNECOLOGY.—Dr. W. H. Rumpf (The American Journal of Obstetrics). The originator of this system, Thure Brandt of Stockholm, was a teacher of Swedish gymnastics. The first incentive to this new train of thought was given him in 1847, when a man came to him with acute prolapse of the rectum. He put the patient in the Trendelenburg position and tried to gradually force his right hand deep into the pelvis in the left hypogastrium. He hoped in this way to pull the prolapsed rectum into place. At the same time he made a series of quick vibrating motions over the prolapsed bowel to increase the tonicity of the intestinal muscles. The cure was complete and permanent. Some years later it occurred to him to try the same method in prolapse of the uterus, and in 1861 he successfully treated his first case. Since 1887, the disciples of Brandt have rapidly increased in numbers. Indications for this treatment: Residua of inflammatory processes; cicatricial contractions; thickening and shortening of the several uterine ligaments; wide, loose adhesions cementing together the peritoneal surfaces; firm, stout cords and bands passing from organ to pelvic wall; displacements and fixations of the uterus, tubes and ovaries. The contra-indications are pus and malignant growths.

Technique: The patient lies with her hips resting on the end of a low couch with the thighs and legs flexed, and the feet resting on a chair placed about a foot from the end of the couch. The operator sits at the left of the

patient and introduces one, or, better, two fingers of the left hand into the vagina, passing his arm under the left knee of the patient. The sole purpose of the fingers in the vagina is to raise or fix the parts to be treated. The massage is done entirely with the right hand.

The first objection commonly raised to massage is that it arouses erotic sensations and may lead to masturbation. There is, however, very little irritation if the fingers are kept, as they should be, on the floor of the perineum, away from the clitoris, and perfectly quiet. After having introduced the fingers of the left hand, the right hand is placed on the abdomen passing from above, under the skirts, which have previously been loosened at the waist. The massage may now be commenced. Great tenderness may make this difficult, but it is not a contra-indication, because tenderness is an indication for massage. It should consist of gentle, circular motions in the direction of the venous circulation of the organ to be manipulated. Brandt gives this rule: "Begin all massage gently, more in the surrounding of the diseased part, and when the first tenderness has disappeared, bear on more heavily, taking short rests between. Stop the massage gently as you began, and finish by placing the hand flat on the abdomen or by making a few short vibratory motions."

This procedure should be repeated daily; the time of each treatment should be about ten minutes. Menstruation is not necessarily a contra-indication; in fact, the treatment will often be found at that time most beneficial for the relief of dysmenorrhea. Dr. Rumpf says the results of this treatment in constipation are most gratifying. In a typical, chronic, fixed retroflexion with firm adhesions, thickening and infiltration of all ligaments, with a large congested uterus, massage helps Nature to restore the organs to their normal tonicity by mechanically removing the obstacles which impede proper circulation. He also recommends massage especially in chronic para and peritonitis and in chronic metritis. Dr. E. C. Dudley, the Chicago gynecologist, endorsed Dr. Rumpf's statements.

EYE, EAR, NOSE AND THROAT.

UNDER THE DIRECTION OF W. D. BABCOCK, A.M., M.D., PROFESSOR OF DISEASES OF THE NOSE AND THROAT, COLLEGE OF MEDICINE OF THE UNIVERSITY OF SOUTHERN CALIFORNIA.

EXAMINATION OF DIPHTHERITIC EXUDATE FOR BACILLI—Dr. Mount-Bleyer, (Jour. Am. Med. Assoc.,) recommends the method of Huebuer. A bit of the yellow covering of the membrane from the tonsil is removed with a sterilized spatula and rubbed over the surface of a cover-glass until the film is very thin and almost dry. The glass is then passed through a flame and stained with methyl blue. The specimen stains easily, and is ready in a short time for the microscope. An ordinary objective magnifying 400 to 500 diameters answers, and with a little practice, between the detritus, mucus, pus cells and the various bacteria you will observe nests or pockets of mixed-up bacilli about the size of the tubercle bacillus—most of them slightly bent, some club-shaped, often irregularly seamed. With the presence of these nests established, you may be reasonably certain, almost absolutely certain, that the case is one of true diphtheritis.

WHERE TO OPEN THE ANTRUM OF HIGHMORE.—(Jour. Am. Med. Assoc.) Dr. Eugene S. Talbot of Chicago, and Dr. M. H. Fletcher of Cincinnati, both advise the opening of the antrum at the base of the malar process midway between the root of the second bicuspid and first permanent molar. In this position the lowest point in the cavity can nearly always be reached and also avoid entering the nasal cavity. Between them they examined 7000 antra. They also concluded that antrum trouble is very seldom caused by diseased teeth.

DIPHTHERIA.—A series of 80 cases treated with diphtheria antitoxine, at the Eastern Hospital, London, by Drs. Washbourn, Goodall and Cord, (British Med. Jour., Dec. 22, 1894.) The injection was made into the flank under strict antiseptic precautions. Quantity injected varied from 5 to 30 c. c. m., total quantity from 5 to 90 c. c. m.

Jan. 1st, '94 to Oct. 22nd, '94, 397 cases, 166 deaths; mortality 41.8 per cent.

Sept. 14th, '94 to Oct. 22nd, '94, (not treated by serum) 72 cases, 28 deaths; mortality 38.8 per cent.

Oct. 23d, '94 to Nov. 27th, '94, (treated by serum) 72 cases, 14 deaths; mortality 19.4 per cent.

Mortality it will be seen diminished one-half. As to dosage, they recommend in severe cases, 20 c. c. m. when the patient is first seen, followed by 10 c. c. m. in 18 or 24 hours, and again of 5 or 10 c. c. m. in another 18 or 24 hours; for a moderately severe case, a first dose of 10 c. c. m. followed by one of 5 c. c. m. the next day and perhaps another 5 c. c. m. the day after that; for a mild or doubtful case a dose of 5 c. c. m., should there be any reason to suspect that the case is likely to become worse. The dose is to be regulated by the severity of the case, not by the age or weight of the patient.

VAPORIZED FLUIDS.—Dr. Homer M. Thomas of Chicago, (Jour. Am. Med. Assoc., Dec. 29, '94,) reports five experiments to determine how far vaporized fluids were inhaled. In only one case were they found below the larynx. His methods and instruments seem to be faulty.

DIPHTHERIA—PREVENTION OF.—(Jour. Am. Med. Assoc.) Dr. U. O. B. Wingate of Milwaukee, advises for the prevention and control of diphtheria: Isolation and disinfection, but the details of these two important measures must be fully and clearly understood. No case however light should be discharged from isolation for at least four weeks from the time of the commencement of the disease and no child should be allowed to attend school or mingle with other children until six weeks from the commencement of the last case in the house.

ICHTHYOL—As a gargle is recommended by Dr. Sonnenberg in acute pharyngitis. It is used in the strength of a two or three per cent. solution every fifteen minutes.—(London Lancet.) Bosworth considers aconitia almost a specific in this condition.

ACUTE GLAUCOMATOUS SYMPTOMS FROM ESERINE.—Dr. J. T. Carpenter reports in "The Phil. Polyclinic," Dec. 15th, 1894, two cases of acute glaucomatous symptoms from the use of eserine. It must have been contaminated with some mydriatic. The eserine was taken from a sealed Merck's package and a new dropper was used. He suggests the trial of all new solutions on the normal eye before they are used in diseased conditions.

AMETROPIA IN MICROSCOPIC WORK.—Dr. Charles A. Woodruff, Captain and Ass't Surgeon, U. S. A., (Jour. of the Am. Med. Assoc., Nov. 24th,

1894,) says: Persons with errors of refraction can therefore assure themselves that no correcting lenses are needed in microscopic work except, perhaps, in astigmatism of high grade, and then only when using the lower powers. Spectacles can be discarded for almost all ordinary work.

DIAGNOSIS OF PARALYSIS OF THE OCULAR MUSCLES.—Dr. E. Landolt (Brit. Med. Jour.,) gives the following simple rules for helping diagnosis:

1. The affected eye is that in the direction of the image, of which the diplopia increases.

2. The paralyzed muscle is the one which would have given to the eye the position and the direction of the false image.

3. The direction of the patient's head corresponds in every way to the physiological action of the paralyzed muscle.

ELECTRICITY IN AURAL DISEASES.—Dr. H. C. Houghton, (Jour. Ophthalmology, Otology, Laryngology, Oct., 1894,) concludes an article on this subject thus: From the application of electricity in a large number of cases of diseases of the middle ear I have been led to the conclusion that the results secured by faradization or by sfatic electricity equal if not surpass those reached by galvanism. Certainly, in the restoration of muscular tonicity, and modification of the nutrition of the middle ear it seems to me to be true; and in the modification of the subjective noises, faradism and static electricity have served me better than galvanism, with the disposition of mind to favor static even above faradic.

INTRA- TYMPANIC MASSAGE IN CHRONIC AURAL CATARRH.—Wurdemann, (Jour. Am. Med. Assoc.,) uses compressed air at a pressure of fifteen to twenty pounds through an eustachian tube catheter for massage. He interrupts the stream of air every second with his thumb. This massages the membrane of the tube, the drum, the ossicles, loosening the joints, breaks up the adhesions and increases nutrition. This is used once daily for five or ten minutes until improvement ceases. After this only occasionally. The air can be medicated where stimulation is indicated, as it is in most cases.

ARISTOL.—Dr. Krebs of Hiddisheim, recommends Aristol, which is a di-iodide of thymol, in chronic purulent otitis, in all cases where the perforation is large and where there are granulations in the tympanic cavity which are not due to caries of the bone.—(London Lancet.)

A NEW AND SUCCESSFUL TREATMENT OF TYPHOID FEVER.

Some time ago Dr. Hugo Summa of this city, a thorough physiologist and skillful practitioner, in considering the fact that there is an almost total absence of the usual signs of bile in the faeces of patients suffering from typhoid fever, came to the conclusion that possibly some of the distressing features of late typhoid may be due to a deficiency of bile, and determined to try the introduction of ox-gall into the lower bowel in well marked cases of the disease. This plan has now been carried out in a considerable number of cases, and with the happiest of results thus far,—not a single death having occurred when the bile treatment has been instituted,—whereas in a similar number of contiguous cases of apparently the same degree of severity the usual fatality has been noted.

The treatment is as follows: Two ounces of fresh bile (which can be obtained at any packing house and kept for two or three days if the air be excluded) may be mixed with from two to three ounces of water and thrown

into the rectum with an ordinary household syringe. Some patients cannot endure the bile of this strength as it sometimes is quite irritating to the rectal mucous membrane; in which cases as much as fourteen ounces of water must be added to the two ounces of bile. The injection is given every night and morning.

Under the influence of the bile, conjoined with proper feeding, the course of fever has been very favorably modified in instances where the disease was far advanced when the new treatment was begun; in one patient at the City Hospital, recovery resulted even after three severe hemorrhages had occurred, and in a large number of cases of typical typhoid in which the treatment was employed before the end of the first week the disease was checked in a very few days.

This is truly a remarkable showing. And if further use of rectal injections of diluted ox-gall gives the same results as those already obtained in the hospitals of St. Louis, Dr. Summa will have given us a remedy second in importance to the recent cure for diphtheria. Full details of the treatment and results will be published as soon as its efficacy has been thoroughly tested.—Editorial in The St. Louis Clinique, Nov., 1894.

CORRESPONDENCE.

LICENTIATES OF THE CALIFORNIA STATE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners of the Medical Society of the State of California, held Dec. 13th, 1894, the following were granted certificates to practice medicine and surgery in the state.

ADAMS, CHARLES ELI, 3866, Santa Clara, Dartmouth Med. Coll., N. H., Nov. 21, '93.
BECKINGSALE, D. L., 3867, Covina, University of Edinburgh, Scotland, Aug. 1, '72.
CARTWRIGHT, CHAS. O., 3868, San Francisco, Med. Dep. Univ. Mich , June 27, '89.
FLYNN, ANNA M., 3869, San Jose, Med. Dept. Univ. Mich., June 30, '92.
FREEMAN, RICHARD T., 3870, San Francisco, Royal Coll. Surgery, England, Jan. 27, 64.
GERLACH, FREDERICK C., 3871, San Jose, Med. Dept. Univ. Pennsylvania, June 7, 94.
GORDON, HOWARD S., 3872, Pomona, Kansas City Coll. Phy.. and Surg., Mo., Mar. 4, '78.
KOBAYASHI SHINOBU, 3873, San Francisco, Nugata Med. Coll., Japan, July 20, '87.
LAYNE, E. R., 3874, Med. Dept. Arkansas Industrial Univ., Ark., Mar. 1, '88.
MEZGER, L. K., 3875, Los Angeles, Med. Dept. Univ. Mich., June 26, '89; Rush Med. Coll. Ill,, Mar. 31, 91.
MYGATT, ALBERT S., 3876, Otay, Albany Med. Coll., N. Y., Dec. 26, '71.
PILKINGTON, JOHN B., 3877, Los Angeles, Cooper Med. Coll., Cal., Nov. 4, '82.
SCOTT, MARY, 3878, Los Angeles, Woman's Med. Coll., Pa., May 5, '92.
WALLIS, NATHANIEL, 3879, Sidney, Australia, Med. Dept. Univ., Vermont, Aug. 17, '94.
WEBSTER, FRED. F., 3880, Sunol, Med. Dept. Univ. Buffalo, N. Y., Feb. 23, '75.
WHITEHOUSE, L. H. 3881, Oakland, Dartmouth Med. Coll., N. H., Oct. 31, '66.
YEARGAIN. ORVILLE. W., 3882, San Jose, Med. Dept. Willamette Univ., Or., Apr. 6, '91.

MEDICAL DEPARTMENT UNIVERSITY CAL., NOV. 20TH, 1894.

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CHAS. C. WADSWORTH, M D., Secretary.

At a meeting of the Board of Examiners of the Medical Society of the State of California, held Friday, Jan. 4th, 1895, the following were granted certificates to practice medicine and surgery in the state.

ABBOTT, GEO. EDWARDS, 3938, Coronado, Harvard Univ. Med. School, Mass., Feb. 14, '72.
BAGLEY, CHARLES WESLEY, 3939, Oakdale, Med. Dept. Univ. Vermont, June 28, '76.
BOONE, REUNETTE E. FULLER, 3940, Los Gatos, Med. Coll. Syracuse Univ., N. Y., June 9, '81.
BROWN, WARREN, 3941, San Francisco. Bellevue Hosp. Med. Coll., N. Y., Mar. 11, '89.
CHARLES, WILLIAM B., 3942, Lemore, Med. Dept. Univ. Louisville, Ky., Mar. 1, '87.
FISH, CHARLES W., 3943, Los Angeles, Med. Dept. West. Reserve Univ. Ohio, Feb 27, '84.
GATES, CHARLES O., 3944, Fresno, Kansas City Med. Coll. Mo., Mar 20, '93.
HARD, CHESTER, 3945, Los Angeles, Indiana Med. Coll. Ind., Feb. 17, '48; Med. Dept. Univ. Mo., Feb. 18, '54.
LATON, WINFIELD S., 3946, Minneapolis, Long Island Coll. Hosp. N. Y., June 21, '77.
MCCLELLAN, GEORGE W., 3947, Los Angeles, Med. Dept. Univ. Buffalo, N. Y., Feb. 25, '85.
NEWLAND, HENRY, 3948, Los Angeles, Coll. Phys. and Surg. Keckuk, Iowa, Feb. 17, '76.
RUBLEMAN, GEO. J., 3949, Los Angeles, Rush Med. Coll. Ill., Feb. 24, '80.
TRUMBULL, JOHN, 3950, Montecito, Harvard Univ. Med School, Mass., June 27 '83.
DE PUY, E. S., 3951, Smith-River, Med. Dept. Univ. Cal., Nov. 20, '94.
LELAND, THOS. B. W., 3952, San Francisco, Med. Dept. Univ, Cal., Nov. 20, '94.

COOPER MEDICAL COLLEGE, CAL., DEC. 6, 1894.

ALDEN, B. F., 3953, San Francisco.
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Communications are invited from physicians everywhere; especially from physicians of the Pacific Coast, and more especially from physicians of Southern California and Arizona.

EDITORIAL.

INTRODUCTION TO VOLUME X.

It is certainly with pleasure that we greet our readers at the beginning of our tenth year. We celebrate this event by an increase in the size of the page and by the division of the work into departments. We hope thus to improve both the quantity and quality of the material published. Just as the various systems of medicine are so popular with the profession because the various topics are handled by specialists, so we expect by assigning the different branches to those of our colleagues especially qualified, to give our readers a better journal. We hope to sustain the reputation of publishing a progressive and interesting monthly.

Dr. Joseph Kurtz, Professor of Clinical Surgery in the Medical College in this city, and his son, Dr. Carl Kurtz, will have the Surgical Department. Dr. Joseph Kurtz has been connected with the *Practitioner* from its foundation and is well known from his happy way of putting things.

Dr. Wm. D. Babcock, one of the oldest and best known specialists in this section, and Professor of The Throat and Nose in the Medical College, will conduct the division on the Eye, Ear, Nose, and Throat.

Dr. F. A. Seymour while taking no special work, will still continue to do effective service in the editorial and review columns.

Dr. Walter Lindley, Associate Professor of Gynecology, will again be on the editorial staff. It is due Dr. Lindley to say that the success of this magazine in its earlier years was largely the result of his earnest labors. The Doctor is a pleasing writer and a good worker and our readers will be gainers by his return to medical journalism.

Dr. H. G. Brainerd, Professor of Diseases of the Mind and Nervous System, will gather the gems of neurology for our readers' instruction.

Drs. Frank and Rose Bullard will make judicial use of pen and scissors in General Medicine.

As in the beginning of last year, we represent four societies in this end of the State, and shall continue to publish the papers read before them. Our numbers are constantly growing and we desire to hear from the new comers. Some of our older practitioners are too busy to write and we wish to hear from the others before they become too much engaged in professional work to write articles. The editors-in-chief will still continue to toil on editorials, reviews, business management and the thousand and one things connected with journalism. When we were a wee bit of a chap we said we were going to be a doctor or a "printer man," and strangely enough, we are now both, And this reminds us we are editors and hence correspondingly rich; the more money we get for subscriptions the more money will be put into immediate circulation; so if you wish to see how much good a dollar and a half may do, send it to the SOUTHERN CALIFORNIA PRACTITIONER.

THE CLIMATOLOGICAL YEAR.

The past year has been a dry and cool one—the thermometer averaging two degrees lower than usual and there being but half the ordinary rainfall. Counting by years, there were 7.52 inches of rainfall in Los Angeles, but reckoning by seasons, the season of '94 had but 5.52 inches—about one-third the average amount. This is the only true scientific way to record the meteorological reports. There are but two seasons in Southern California—the wet and the dry. Spring,summer, fall, and winter are meaningless terms here—so are the artificial divisions by years. Our real spring is in the late fall. Growth and the new season commence either in November or December. "The early and late rains" of November and December and February and March with lighter sprinkles in January make an ideal season—just what seems in store for us in '95. Every month except October was slightly more than 2 degrees colder than normal—and October just reversed these figures by registering an average of 2 degrees warmer than usual. Old Sol presented an unclouded visage 153 days, kept his features partly hidden, usually in the morning, for 167 days and for 45 days he was obscured either by clouds or rain. The highest temperature was September 15th, when it reached 99 degrees, and the coldest, January 6th, 32 degrees—those being extremes of heat and cold, the mean for these respective days being 72 and 42 degrees. In short, we have had a very comfortable year, the present season, however, is much more cheerful for there is very good promise of large and paying crops. Just the sort of weather to make one contented with this life and make him fully satisfied with the climate this side of the famous Styx. In sooth, we doubt if the Elysian fields are more balmy or fertile than the plains of Los Angeles.

LOS ANGELES COUNTY MEDICAL ASSOCIATION.

The officers elected for the ensuing year are: President, Dr. O. D. Fitz Gerald; vice-president, Dr. L. M. Powers; secretary, Dr. Lula T. Ellis; assistant secretary, Dr. Rose T. Bullard; treasurer, Dr. Joseph Kurtz, M. D. Trustees: Drs. F. T. Bicknell, H. G. Brainerd, G. W. Lasher, E. A. Follansbee, W. W. Hitchcock, E. R. Smith and W. LeMoyne Wills.

The membership is now 119, there being 106 active and 13 honorary members. New members received during 1894, are: Drs. J. Lee Hagadorn, Irving U. Parsons, H. G. Cates, Ralph Williams, J. W. Trueworthy, D. Winslow Hunt, Milbank Johnson, Eugene LeBaron, A. L. Holcombe, Robert R. Dorsey, F. O. Yost, A. L. MacLeish, W. H. Fales, Anne W. Nixon, E. A. Praeger, and C. E. Stoner.

EDITORIAL NOTES.

McArthur, manufacturer of McArthur's Syrup of Hypophosphites, compounded chemically pure, of Boston, will send a diary for 1895, upon the receipt of twenty cents in stamps.

One of the very pleasing features of the Pasadena meeting of the Southern California Medical Society was the neat, attractive display of the drug firm of Clinton E. Worden. It demonstrated that nearly every thing one could think of not only could be but *is* manufactured on this coast. We heard numerous favorable comments from the visiting physicians; such enterprise displayed in hard times speaks well for the character of the house.

Many members of the Class of 1879, Jefferson Medical College of Philadelphia, are desirous of having a class reunion on the occasion of the 15th anniversary of their graduation. Owing to changes, comparatively few addresses are known and therefore this means is resorted to, with the hope that every member of the class of 1879 who reads this notice will communicate at once with their class President, Dr. Philip R. Koons, Mechanicsburg, Cumberland Co., Pennsylvania.

E. B. Treat, Publisher, New York, has in press for early publication the 1895 International Medical Annual, being the thirteenth yearly issue of this eminently useful work. Since the first issue of this one volume reference work, each year has witnessed marked improvements; and the prospectus of the forthcoming volume gives promise that it will surpass any of its predecessors. It will be the conjoint authorship of thirty-eight distinguished contributors and Specialists, from America, England and the Continent. It will contain the progress of Medical Science in all parts of the world, together with a large number of original articles and reviews by authors on subjects with which their scientific reputation is identified. In short, the design of the book is to bring the practitioner into direct communication with those who are advancing the Science of Medicine, so he may be furnished with all that is worthy of preservation, as reliable aids in his daily work. Illustrations in black and colors will be freely used in elucidating the text. A most useful investment for the Medical practitioner. The price remains the same as heretofore, $2.75.

BOOK REVIEWS.

A SYSTEM OF LEGAL MEDICINE. BY ALLAN McLANE HAMILTON, M. D., Consulting Physician to the Insane Asylums of New York City, etc., and LAWRENCE GODKIN, Esq., of the New York Bar, with the collaboration of twenty-seven authors. Illusrtated. Vol. II. New York: E. B. Treat, 5 Cooper Union. Price, $5.50 cloth; $6.50, sheep.

Wm. B. Hornblower opens this volume by a short treatise on the Duties and Responsibilities of medical experts, the key note of which is seen in the statement that "medical experts should free themselves as far as possible from the bias of their retainers."

The second article is a book of itself, making 140 pages, and followed by a bibliography of 6½ pages. The subject of this exhaustive investigation is insanity in its Medico-Legal Bearing, and it is written by Hamilton himself. A review of this article alone would, in order to do it full justice, take up all of the space allotted to this entire book. His classification of insanities is made in reference to development. We believe such a classification to be logical. His table is as follows:

I. EVOLUTIONAL INSANITIES.
Idiocy, Cretinism.
Insanities with limited delusions.
Insanities with predominant moral weakness.
Periodical and alternating insanities.
Insanities with Imperative Concepts.
Epileptic, hysterical, and periodical alcoholic insanities.
Infantile paretic dementia of Clouston.
Adolescent Insanity.

II. INSANITIES OF NORMAL DEVELOPMENT (acquired.)
Mania, } acute.
Melancholia, } chronic.
Traumatic, toxic and somatic insanities.

III. INVOLUTIONAL INSANITIES (Retrogressive.)
Terminal Dementia.
Consecutive Dementia.
Senile Dementia.
Paretic Dementia.

Judge Pratt, of N. Y. Supreme Court, writes a short article on Mental Responsibility of the Insane in Civil cases.

Dr. B. Sacho, Professor of Mental and Nervous Diseases in the New York Polyclinic, writes a sensible article on Insanity and Crime, in which he scores the "right" and "wrong" test usually applied by the laity.

Louis E. Brisse, of the New York Bar, gives a lawyer's views on the relations of Mental Defect and Disease to Criminal Responsibility.

Dr. Mills writes on Aphasia and other affections of speech.

Dana has a fine article on Traumatic Neurosis—a paper which teems with important points. This article has a splendid bibliography.

Four more articles on kindred subjects are found in this volume. The effects of Electric Currents of High Power upon the Human Body, by Drs. Hamilton and Geo. De Forest Smith; Accident Cases, by Lawrence Godkin; Feigned Diseases of the Mind and Nervous System (an instructive and entertaining paper) by Dr. Philip C. Knapp, and Mental distress as an Element of Damage in Cases to Recover for Personal Injuries, by John E. Parsons, of the New York Bar.

There are five papers on subjects connected with Tax, Birth, Sex, Pregnancy and Delivery, by Andrew F. Currier, M. D.; Abortion and Infanticide, by Chas. Jewett, M. D.

Genito-Urinary and Venereal Affections in their Medico-legal Relations, by F. R. Sturgis, M. D.

Marriage and Divorce, by S. E. Baldwin, and Sexual Crimes, by Chas. Gilbert Chaddock, M. D.

The closing article of this cyclopedic volume is a well written treatise on Surgical Malpractice. by Geo. Ryersen Fowler, M. D. of Brooklyn, New York.

There is an extensive appendix of fifty pages, made up of extracts from the laws of the different States and territories of the United States which relate to the General Care of the Insane.

This volume will admit of three great divisions: Insanities, crimes connected with sex, and suits for damages either against corporations for injuries, or against surgeons for malpractice. Thus it is a very valuable and complete reference book for the doctor, and for the lawyer. A feature of no little value is its extensive and modern bibliography. The judge on the bench, the lawyer in his cases, the physician on the stand, the physician as an examiner, the general practitioner and the specialist, all will find in these volumes the data which will enable them better to perform their respective duties. There are citations in more than 5000 cases, and what is of great importance to physicians, the work is distinctively American.

PRACTICAL URINALYSIS AND URINARY DIAGNOSIS: A MANUAL FOR THE USE OF PHYSICIANS, SURGEONS, AND STUDENTS. By CHARLES W. PURDY, M. D., Queen's University; Fellow of the Royal College of Physicians and Surgeons Kingston; Professor of Urology and Urinary Diagnosis at the Chicago Post-Graduate Medical School. Author of "Bright's Disease and allied Affections of the Kidneys"; also of "Diabetes; Its Causes, Symptoms, and Treatment." With Numerous Illustrations, including Photo-Engravings and Colored Plates. In one Crown Octavo volume, 360 pages, in Extra Cloth, $2.50 net. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry street.

To reach high attainments it is necessary to aim high, so in his preface, the author promises a very thorough handling of the subject. The scope of the volume can not be better stated than the order laid down there: "First, in dealing with normal urine, each constituent has been considered in the following order: Its chemical nature and composition; its source in the economy; the significance of its increase or decrease in the urine, with the relations of these to metabolic processes. food supply, physical surroundings, and tendency toward disease; and finally, the most approved methods of its detection and determination have been described. In dealing with abnormal urine each constituent has been considered, so far as at present known in the following order: the chemical nature and composition; the chemical significance of its appearance in the urine, and, lastly, the most approved method of its detection and determination have been described."

All the changes detected in the urine are considered, also as indicative of corresponding changes in the organism, and the special features of the urine concerned in pathological processes are carefully considered in the second division of the work, Urinary Diagnosis. This enables the student or practitioner to utilize his knowledge gained from examination.

In nothing perhaps as a rule is an examination more superficial or perfunctory than that of the urine, and in no one thing can there, with a better care, be more improvement made. All the symptoms and facts must be judiciously weighed, but if any or many are overlooked, the resulting conclusions must need be lame, but following the order indicated by Purdy, no important point will be omitted. Here as elsewhere system is everything. We know, for instance, that the average excretion of solids for a weight of 135 pounds is 945 grains.

And very often that is all that is done after determining the total excreted. Purdy, however, goes on to tell that 10 per cent. should be deducted between 40 and 50 years of age, 20 per cent. between 50 and 60, 30 per cent. between 60 and 70 and 50 per cent. above 70. And so on according to diet, bodily conditions, health and exercise. How easy too it is to overlook a little albumen in a strongly acid or alkaline urine, care to partly neutralize the specimen quickly shows up the lurking mischief. Many practical points as the above are to be found in this book.

We feel we can fully indorse this work and recommend it to the profession. If bought, we guarantee it will be frequently consulted, our volume already bears the marks of frequent use.

SYLLABUS OF LECTURES ON HUMAN EMBRYOLOGY: AN INTRODUCTION TO THE STUDY OF OBSTETRICS AND GYNECOLOGY. For Medical Students and Practitioners. With a Glossary of Embryological Terms. By WALTER PORTER MATSON, M. D., Professor of Clinical Gynæcology and Lecturer on Obstetrics in the Detroit College of Medicine ; Fellow of Royal Microscopical Society, of the British Zoological Society, American Microscopical Society, etc., etc. Illustrated with Seventy (70) Outline Drawings and Photo-Engravings. 12mo. Cloth, 126 pages, interleaved for adding notes and other illustrations, $1.25 net. Philadelphia: The F. A, Davis Co., Publishers, 1914 and 1916 Cherry street.

After an introduction on the modes of Propagation of Species, functions of the male, sexual development and male reproductive glands, he gives in detail the histological and anatomical structure of the female organs at length. Next he treats of the spermatozoon, spermatogenesis, the ovum Oögenesis and Menstruation, then follows a chapter on the general development of the embryo, and one on the uterine and fetal membranes. The sixth section is the longest, hardest and most interesting—the development of special organs and parts. As science has learned many of its facts from embryological research, so the individual student can often incorporate into his mental being the intricate facts say of neurology only by building from the ground up and comparing man in his different stages. The child at birth, changes in the maternal organism, and directions for practical work complete the volume. The work holds the golden mean —it is neither too superficial, nor does it enter too deeply into byways of discussion. It is an excellent elementary treatise on embryology, and yet takes up enough for the student.

A MANUAL OF THE PRACTICE OF MEDICINE. PREPARED ESPECIALLY FOR STUDENTS. By A. A. STEVENS, A.M., M.D., Lecturer on Terminology and Instructor in Physical Diagnosis in the University of Pennsylvania, etc. Third Edition, Revised Illustrated. Philadelphia: W. B. Saunders, 925, Walnut st. Philadelphia, 1894. $2.50.

This book was written after a careful consultation of 35 standard authors and from them a condensation made so as to place the matter in an assimilable form. Evidently the work "went like hot cakes," for this is the third edition in two years. The volume is by no means a mere index; it contains 500 pages and is condensed so as to get a great quantity of matter into as small a space as possible. Written by a practical teacher, it is especially adapted for students, compiled from many authorities, it gives the ideas of more than one man; recent in its citations, it is modern in treatment; straight to the point, it saves time. Hence it is a valuable work for the practicing physician. If one has extensive treatises on various diseases, this is good to top off with to fix in mind the essentials. So he who has a large library will find it handy; he who has a small one will regard it valuable; he who has none will see in it an epitome of all.

We spoke highly of the former edition and have found it very convenient. We detect in it only a different arrangement and such additions as the advance

in medical knowledge would compel a good book of this class to have. Of its kind—a thoroughly efficient and convenient book; for students it has no equal, and is one we feel perfectly safe to recommend for it will not foster superficiality nor induce laziness.

GREAT RACES OF MANKIND. AN ACCOUNT OF THE ETHNIC ORIGIN, PRIMITIVE ESTATE, EARLY MIGRATIONS, SOCIAL EVOLUTION, AND PRESENT CONDITIONS AND PROMISE OF THE PRINCIPAL FAMILIES OF MEN, TOGETHER WITH A PRELIMINARY INQUIRY ON THE TIME, PLACE AND MANNER OF THE BEGINNING. Complete in four volumes. By JOHN CLARK RIDPATH, LL.D., Author of "Cyclopædia of Universal History," etc. Profusely illustrated with Colored Plates, Race Maps and Charts, Type Pictures, Sketches and Diagrams. The Jones Brothers Publishing Company, Cincinnati; John J. Newbgin, San Francisco, Cal.

The topics discussed in these volumes cannot fail to be of interest to the scientist, the physician, and the inquiring mind, whatever he may be. It discusses the great secrets of nature in a most entertaining style. No novel, no work of fiction was ever so enthralling to the reviewer as was his first reading of speculations as to the origin of man—not since he read Victor Hugo's Les Miserables—which to him was so entertaining that he could not hear the shrieks of his baby brother whom he was sent to attend—has the reviewer met a work which interests as this. The following-out of the evolution of our race by the *foot prints* which, as our emerald brother says, the *hand* of God has made in the sands of time, is a delight. These books are meant for ornament as well as instruction and would grace the parlor as well as the library. Indeed the modern parlor is a soulless thing. Often is the doctor ushered into it. and while waiting in this empty nothingness of fancy, sees no evidence of intellectuality. "Show me a man's books and I will tell his character," says a wise man. Put such volumes as these in the library, and they will make one wise, for to look at them is to look through them, and to look through them is to be instructed in valuable scientific knowledge, for here Ridpath discusses man as a cause and as an effect—as the result of his environment and as modifying his environment—this two fold idea coloring all and shaping the whole.

ESSENTIALS OF THE DISEASES OF THE EAR. ARRANGED IN THE FORM OF QUESTIONS AND ANSWERS. Prepared Especially for Students, by E. B. GLEASON, S.B., M.D., Chemical Professor of Otology, Medico-Chirugical College, Philadelphia, &c. Philadelphia: W. B. Saunders, 925 Walnut St. 1894,

The first 18 pages of this little book is devoted to the anatomy of the ear, the next 10 to tests for hearing, then 24 pages are given to Otoscopy, rhinoscopy, and examination of the patient, then follows the largest division of the book—50 pages on diseases of the external and middle ear, the book concludes with 15 pages on operations and 6 devoted to formulæ. Though the book is elementary, it describes so many things that the student will think there is something in the ear beside the fee. Opposite page 70 there is interleaved a large sheet containing Rohrer's diagnostic table of diseases of the ear—a thorough mastery of which alone would be of inestimable value to the student at the clinics. Otology is one of the neglected subjects by the general student, because there are other things he deems more important, and because for it he must wade through a great deal of matter in the ordinary text books to get the kernel he seeks—this little compend collates these facts for him and brings within his grasp what he would otherwise lose.

ANOMALIES OF REFRACTION AND OF THE MUSCLES OF THE EYE. By FLAVEL B. TIFFANY, M.D. Professor of Ophthalmology and Otology of the University Medical College of Kansas City. Mo. Kansas City, Mo. Hudson-Kimberly Pub. Co. 1894.

There are thirteen chapters in this book on the following topics: Reflection

of Light; Refraction of Light; The Eye: Emmetropia and Ametropia; the Accommodation of the Eye (an interesting and scientific discussion of the subject); How to Examine the Eye; Myopia; Hypermetropia; Astigmatism; Anisometropia; Aphakia (loss of lens) and Presbyopia; Heterophoria (an excellent chapter on the insufficiency of the ocular muscles; by the way, on page 221 there is a typographical error, the word *internal* being used in line 3 when evidently *external* was intended); Strabismus; and lastly Spectacles.

Though a book for specialists, it is written in so clear yet concise style as to be not only intelligible but highly interesting to the general practitioner. On page 83 he touches the general profession thus: "That a large per cent. of headaches so called migraine, ciliary neuralgia, and even *tic douloureux*, with many of the different forms of chorea, of hysteria, of mania even, is due to some anomaly of refraction or accommodation is recognized by the profession at large; and those patients are now readily relieved by the scientific adjustment of glasses."

This is a very important subject and one that in the past few years has received a great deal of attention from the profession, and we are pleased to notice so early an embodiment of the new ideas into such a text book. It is a well arranged work, clearly illustrated and printed in large clear type.

THE MAGAZINE OF TRAVEL.

This is the attractive title of the newest candidate for public favor in the field of periodical literature. The subject of travel naturally appeals to all, and when, as in the case of the initial number of the Magazine of Travel, it is treated by able pens and in the most entertaining manner, it reaches a degree of interest that is at once irresistible and all-absorbing. So well chosen are the varied contents of the number before us that there is no suggestion of dryness or monotony. The most interesting regions of Europe and America are drawn on for materials, and when these are woven into narrative and sketch and story and poetry, by such minds as the Hon. Chauncey M. Depew, the Hon. Theo. Roosevelt, Christine Terhune Herrick, Ella Wheeler Wilcox, Charles D. Lanier, Frank Chaffee, and others equally well known in their respective fields, they should bring instant and marked success to the publication which gives so valuable a contribution to the world's choicest literature. The editor of the Magazine of Travel is Mr. E. H. Talbott, the founder of the "Railway Age," and the home office of the publication is at 10 Astor Place, New York.

The January (New Year's) number of the Overland Monthly is an improvement even on the magnificent Christmas number. It comes out in a new cover that is an artistic triumph. In addition to his ever charming "As Talked in the Sanctum," Mr. Wildman contributes a well illustrated sketch of the strange old Asiatic city of Singapore, under the caption "In the Golden Chersonese." Read in connection with Marsden Manson's masterly artcle on "The Naval Control of the Pacific," it illustrates Mr. Manson's map as one of England's iron chain of forts that encircle the world and control its commerce. Mrs. Mary J. Reid, author of "Four Women Writers of the West," in a late number of the Overland, continues her literary critiques by an essay on "Stedman and his British Contemporaries." The photograph of Dr. Stedman and his study were taken especially for this article. Joaquin Miller's great poem, "The Song of the Balboa Sea," is completed in this number. It is the poetic triumph of the year, and has been received as such at home and abroad. Articles that are of historic interest to Californians are the first installments of "The Evolution of Ship-building in California," by Irving M. Scott, J. M. Scanland and others—a complete record of shipping from the days of Drake's "Pelican" to the present,—and the second part of "The Decline of the Mission Indians," by E. P. Clarke, in which the author lays the blame for their rapid extinction on the early Americans. Among the notable stories are a humorous skit by Granville P. Hurst,—"Tim Slathers' Ride"; Part II of "True Tales of the Old West," by Hon. Rollin M. Daggett; "Mrs. Badger's Snoot," by Horace Annesley Vachell, and "The Relapses of Pap," by L. B. Bridgman. The illustrations for the number are by Boeringer, Peixotto, Dixon, and other well known artists. The book reviews are particularly complete and interesting.

MONTHLY METEOROLOGICAL SUMMARY.

U. S. WEATHER BUREAU, LOS ANGELES STATION.

Los Angeles, California. *Month of December, 1894.*

Date	TEMPERATURE Max.	Min.	Mean	Precipitation in inches and hundredths
1	66	44	55	0
2	72	41	56	0
3	75	44	60	0
4	67	42	54	0
5	51	48	50	.87
6	61	48	54	.49
7	61	41	51	0
8	60	47	54	1.15
9	57	42	50	0
10	63	47	55	.10
11	62	44	53	.01
12	64	42	53	T
13	64	42	53	0
14	62	48	55	T
15	61	49	55	T
16	63	44	54	0
17	60	45	52	0
18	64	50	57	T
19	59	52	56	1.33
20	59	40	50	.04
21	61	40	50	0
22	62	45	54	0
23	62	43	52	0
24	53	39	46	0
25	66	45	56	0
26	58	51	54	T
27	63	52	58	T
28	60	53	56	T
29	60	51	56	.57
30	61	52	56	.05
31	63	47	55	.01

SUMMARY

MONTHLY RANGE OF BAROMETER:

Mean Barometer, 30.08.
Highest barometer, 30.31, date 22.
Lowest barometer, 29.85, date 12.
Mean Temperature, 54°.
Highest temperature 75°, date 3.
Lowest temperature 39°, date 24.
Greatest daily range of temperature 31°, date 3.
Least daily range of temperature 3°, date 5.

MEAN TEMPERATURE FOR THIS MONTH IN

1877	57°	1883	56°	1889	55°
1878	55°	1884	53°	1890	61°
1879	53°	1885	53°	1891	53°
1880	56°	1886	56°	1892	54°
1881	55°	1887	53°	1893	58°
1882	57°	1888	57°	1894	54°

Mean temperature for this month for 16 years, 56°
Total deficiency in temp. during the month, 64°
Total deficiency in temp. since Jan. 1, 773°
Prevailing direction of wind, East.
Total movement of wind, 2655 miles.
Maximum velocity of wind, direction, and date, 23m, W., 19th.
Total Precipitation, 4.62 inches.
Number of days on which .01 inch or more of precipitation fell, 10.

TOTAL PRECIPITATION FOR THIS MONTH IN

1878	4.70	1884	4.65	1890	2.32
1879	6.53	1885	1.65	1891	1.99
1880	8.40	1886	.26	1892	4.18
1881	.52	1887	2.68	1893	3.65
1882	.08	1888	6.26	1894	4.62
1883	2.56	1889	15.80		

Average precip'n for this month for 16 years, 4.46.
Total excess in precip'n during month .16.
Total precip'n from Sept. 1,'94, to date, 5.36 inch.
Averge precip'n from Sept. 1,'94, to date, .. inch.
Total deficiency from Sept. 1,'94, to date, 1.54 in.
Average rainfall for 10 wet seasons, 21.58 inches.
Number of clear days, 9.
" partly cloudy days, 14.
" cloudy days 14.

NOTE—Barometer reduced to sea level. "T" indicates trace of precipitation.

METEOROLOGICAL SUMMARY SOUTHERN CAL., OCTOBER, 1894.

STATIONS	TEMPERATURE Mean	Max.	Min.	Mean Barometer	Relative Humidity	RAINFALL Days	Am't	WEATHER Clear	Fair	Cl'dy	WIND Direc-tion	Total Mov't
Los Angeles	54.	75.	39.	30.08	77.	10	4.62	9	8	14	E	2,655
San Diego	55.	70.	41.	30.08	78.	14	2.26	10	4	17	NE	3,197
Santa Barbara	54.1	69.	41.5		74.	8	4.67	11	5	15	W	3,110
Yuma	55.	72.	37.	30.07	63.	6	.40	12	8	11	N	3,943
.....	.....	.....	.....	.....	.....	....	.....	....	....	..	.....	.....

OBSERVERS.—George E. Franklin, U. S. Weather Bureau, Los Angeles; M. L. Hearne, U. S. Weather Bureau, San Diego; Hugh D. Vail, Santa Barbara; A. Ashenberger, U. S. Weather Bureau, Yuma.

REGISTERED MORTALITY OF LOS ANGELES.

WITH SEX AND NATIVITY OF DECEDENTS.

Estimated Population, 75,000. *December, 1894.*

CAUSE OF DEATH	Total Deaths	Annual rate per 1000	SEX		NATIVITY				RACE		
			Male	Female	Los Angeles	Pacific Coast	Atlantic States	Foreign Born	Caucasian	African	Mongol
Deaths from all causes	109	17.43	58	51	18	9	45	37	103	2	4
Deaths under 6 years	17										
i. Specific infectious diseases	25		15	10	6	5	8	6	25		
ii. Diseases of digestive system	6		3	3	3		2	1	6		
iii. Diseases of respiratory system	33		15	18	5	4	11	13	31		2
iv. Diseases of nervous system	8		3	5	1		2	5	8		
v. Diseases of circulatory system, blood and ductless glands	6		4	2			3	3	5		1
vi. Diseases of genito-urinary org'ns	7		4	3			5	2	7		
vii. Constitutional diseases	3		1	2			1	2	3		
viii. Intoxication, violence, accidents	8		8				7	1	7	1	
ix. Miscellaneous diseases	13		5	8	3		6	4	11	1	1
i. Septicæmia	2			2		1		1	2		
Pyæmia	1		1				1		1		
Diphtheria	9		5	4	3	4	2		9		
Erysipelas											
Typhus fever											
Typhoid fever	3		1	2			3		3		
Malarial fever											
Scarlet fever											
Measles											
Cerebro-spinal meningitis											
Smallpox											
Tuberculosis	8		7	1	2		2	4	8		
Influenza	2		1	1	1			1	2		
Dysentery											
Syphilis											
Tetanus											
ii. Diseases of the œsophagus											
Gastritis	1			1			1		1		
Gastro-enteritis	2		2		2				2		
Cholera infantum	1			1	1				1		
Enteritis	1			1			1		1		
Appendicitis											
Intestinal obstruction											
Diseases of liver	1		1					1	1		
Peritonitis											
iii. Membranous croup	3		1	2	1	1		1	3		
Bronchitis	1		1					1	1		
Pneumonitis	12		6	6	4	1	2	5	11		1
Pleuritis											
Phthisis	17		7	10		2	9	6	16		1
iv. Diseases of brain	8		3	5	1		2	5	8		
Diseases of spinal cord											
Eclampsia											
Epilepsy											
v. Diseases of heart	5		4	1			2	3	4		1
Degeneration of arteries											
Aneurism											
Anaemia	1			1			1		1		
vi. Uraemia	2		2				1	1	2		
Acute Bright's disease	1			1			1		1		
Chronic Bright's disease	3		1	2			3		3		
Diseases of genital-organs	1		1					1	1		
vii. Rheumatism	1			1				1	1		
Gout											
Inanition											
Senility and Asthenia	1			1				1	1		
viii. Alcoholism											
Opium habit											
Suicide	4		4				3	1	4		
Violence and accidents	4		4				4		3	1	
ix. Tumors—malignant	7		2	5			4	3	5	1	1
Tumors—non-malignant											
Other diseases	6		3	3	3		2	1	6		

L. M. POWERS, M.D., Health Officer.

OUR ADVERTISERS.

THE REAL VALUE OF THE MEDICINAL PEROXIDE OF HYDROGEN PREPARATIONS FOUND IN THE MARKET.

BY H. ENDEMANN, PH. D., CHEMIST.

Formerly with the Health Department of New York City.

My attention having repeatedly been called to several reports and analyses made by different chemists and published by some medical journals, I concluded to examine all the brands of peroxide of hydrogen which I could find on the market, in order to ascertain the real value of each when intended to be used as an antiseptic remedy, both internally and externally.

The reports on the subject which have come to my knowledge are quite contradictory, and my object is to impart to the medical profession the results of my experiments, which have been made on fourteen fresh samples, purchased by me in duplicate, directly from the manufacturers or their selling agents.

These brands have been tested for the volume of available oxygen, the amount of residue, the degree of acidity, and the amount of soluble baryta salts contained therein, as per following table:

BRANDS	Volume of Available Oxygen, determined by means of a solution containing 5.665 Grammes of Permanganate of Potash per liter of distilled water	Residue obtained from 100 C. C. of Peroxide of Hydrogen dried at 120 degrees C.	Acidity expressed in Cubic centimeters of Normal Volumetric Soda Solution for 100 C. C. of Peroxide	Baryta found in Soluble Baryta Salts contained in 100 C. C. of Peroxide.
No. 1. John Bene's Peroxide of Hydrogen Medicinal	10.50	0.1886	2.19	None
No. 2. Hydrozone	27.35	0.2180	3.11	None
No. 3. Larkin & Scheffer's Peroxide of Hydrogen Medicinal	9.55	0 120	6.75	None
No. 4. Mallinckrodt's Peroxide of Hydrogen Medicinal	9.65	0.1408	1.43	None
No. 5. Marchand's Peroxide of Hydrogen Medicinal	16.55	0.564	1.20	None
No. 6. McKesson & Robbins' Peroxide of Hydrogen Medicinal	10.95	0.0540	0.44	None
No. 7. Merck & Co.'s Peroxide of Hydrogen Medicinal	0.50	0.2418	4.57	None
No. 8 Oakland Chemical Co.'s Peroxide of Hydrogen Medicinal	10.50	0.0382	0.34	0.0017
No. 9. Peuchot's Peroxide of Hydrogen Medicinal	10.60	0.4674	1.77	0.0018
No. 10. Power's & Weightman's Peroxide of Hydrogen Medicinal	8.40	0.0830	2.03	None
No. 11. Pyrozone, 3 per cent	11.20	0.0534	0.76	None
No. 12. Rosengarten & Son s Peroxide of Hydrogen Medicinal	3.10	0 1002	0.25	None
No. 13, Smith, Kline & French Co's Peroxide of Hydrogen Medicinal	6.15	0.0880	2.6	None
No. 14. E. R. Squibb's Peroxide of Hydrogen Medicinal	12.40	1.004	12.04	None

By referring to this table it is easily understood that sample No. 2, "hydrozone," is far superior to any other which has ever been made, not only on account of its containing a much larger amount of available oxygen, but also owing to the presence of a small quantity of several essential oils, the respective nature of which could not be determined, very likely because they have been submitted to the oxidizing action of peroxide of hydrogen before being used to make "hydrozone."

I attribute to this small quantity of essential oils the great superiority of hydrozone over any other brands of H2 O2 as a healing agent.

When hydrozone is diluted with distilled water, in the proportion of half and half, the resulting mixture contains about 13.5 volumes of available oxygen, and its bactericide power still remains the same as the bactericide power of sample No. 5, which contains 16.55 volumes of available oxygen.

Sample No. 14 comes next to sample No. 5, but it is readily seen that the degree of acidity is entirely too large for a preparation which is to be applied to the most sensitive diseased mucous membranes.

Sample No. 11, called "Pyrozone," which contains 11.20 volumes of available oxygen, is quite similar to sample No. 6, with the exception that the latter contains a small quantity of salicylic acid. Very likely the salicylic acid has for its object to increase the bactericide power, but unfortunately, I fear that it impairs the keeping properties of this preparation.

Acidity.—The 14 brands which I have examined contain free acids (phosphoric, sulphuric, muriatic); and I must say that peroxide of hydrogen medicinal should never be made neutral before using, even in the most delicate cases. Neutral peroxide of hydrogen rapidly decomposes under all conditions of exposure.

The keeping properties of H2 O2 solutions vary a great deal with the degree of purity and the percentage of free acids contained therein.

If the proportion of acid is too large, the profession well know that it acts as an irritant upon diseased surfaces. If it is too small, the solution does not keep well.

My opinion is that a standard solution of medicinal H2 O2 must answer the following tests:

1. It should contain at least 15 volumes of available oxygen.
2. The quantity of free acids contained in 100 cubic centimetres should require not less than 1 c. c. and not more than 3 c. c. of normal volumetric soda solution, to be made neutral. Such a small quantity of free acid is not objectionable.
4. It must be free from sediment.

It is to be noticed that the brands No. 7 and No. 12 are valueless.

The brands No. 8 and No. 9 are not fit for medicinal uses, owing to the fact that they contain traces of soluble baryta salts.

The brand No. 3 has a heavy sediment of sulphate of baryta, which may be considered inert towards the system, but it is certainly detrimental to the keeping qualities of this preparation.

Brand No. 14, which is sold as a fifteen volume solution, is really 16.55 volumes, viz.: About ten per cent. above the standard.

The brand No. 2, which is sold without any mention of volume, is really a 27.35 volume solution, viz.: Ninety per cent. above the standard.

None of the other brands come up to the standard, but on the contrary they run from 35 to 55 per cent. below.

25 William street, New York City.

A DELICATE FOOD.

The man, woman or child who never heard of Burnham's Clam Bouillon is to be pitied, as it is the most delicate food for the sick, the invalid and convalescent known and the pride of the epicurean. It contains all the natural elements for building up the body quickly without taxing the digestive organs. It is the only animal food that is self digesting, and it prevents the fermentation of food in the stomach. Try it. Your druggist or your grocers sell it.

USE ONLY GENUINE SUCCUS ALTERANS.

Frank McDonald, M. D., (College Physicians and Surgeons, Baltimore, Md., 1883, Supreme Medical Director W. S. of I. O. U. A., Medical Examiner Equitable Life of New York., Sec'y Pittsburg Obstetrical Society, etc., says:

"Your Succus Alterans gives me perfect results. I prescribe it almost daily, and have never failed to obtain the effect sought. I regard it as specific for syphilis in all stages. Imitations which I have been induced to try occasionally have always failed. Such failures have only served to confirm my confidence in the genuine Succus Alterans. I can pay no greater tribute to an article so worthy and so meritorious than to say it is the very best and safest alterative known to the profession."

SANMETTO IN GENITO-URINARY DISEASES.

I can say that during a thirty-four years' practice of medicine I have not found a remedy that equals "Sanmetto" in the treatment of all genito-urinary diseases of men and women. I have used over fifty bottles of "Sanmetto."

IRA D. HOPKINS, M. D., Utica, N. Y.

CHOREA.

The following treatment for Chorea is highly recommended by Dr. L. E. Lemen, Professor of Clinical Surgery in the Gross Medical College of Denver; Health Commissioner of Denver; Surgeon to St. Joseph's Hospital; Division Surgeon of Union Pacific Railway; President of State Board of Commissioners of Insane Asylum, etc., etc. "Put the patient on Fowler's solution of Arsenic and continue untill the eyelids show distention, then stop the arsenic and administer "Angier's Petroleum Emulsion" untill this symptom disappears."

Dr. Lemen claims that by alternating these two remedies in this way he has never failed to cure the worst cases in from three to five weeks.

Send twenty cents in stamps to McArthur Hypophosphite Co., Boston, for McArthur Pocket Diary, 1895. "Handiest and most useful little book for the physician that we have seen. Contains doses of drugs including new remedies, a list of disinfectants and how to use them, antidotes for poisons, methods of treating emergencies, an obstetric ready-reckoner and other valuable information."—Brooklyn Medical Journal.

"A blink o' rest's a sweet enjoyment," so wrote Bobbie Burns to a friend. Insomnia is nothing more or less than indigestion under another name. Why walk your room at night and let the baby cry when a cup of Burnham's C'am Bouillon will quiet your nerves and make the baby sleep? It will bring nature's balmy restorer to both. It rests the brain and nerves, and you get quiet sleep. Thinking men and women should investigate and try it. At your grocers and druggist.

"A full dose of Antikamnia and Quinine will promptly relieve many cases of la grippe. This combination will often arrest a commencing pneumonia or pleuritis. This combination is also valuable in the racking headache with high fever attendant upon malarial disorders. "S. J. Clarke, M. D. of New York, in the Va. Med. Monthly. The most desirable form of exhibiting these remedies are the "Antikamnia and Quinine Tablets" each containing 2 1-2 gr. Antikamnia and 2 1-2 gr. Quinine.

DR. E. W. ALLISON,
Rooms 220-221 Crocker Bl'd, San Franci co, Ca'.

We extract hundreds of gallons of refuse from best Norwegian cod liver o'l in manufacturing Codliver Glycerine. The chief composition of this refuse is stearine, fish-fat, fish-glue, bile-pigment and liver-pulp, which are the insoluble, indigestible, nauseating and rancid bearing portions of the oil. The presence of these materials usually defeat the purpose for which cod liver oil is given. Codliver Glycerine is the only preparation of cod liver oil from which these materials are eliminated.

In the best cod liver oil these substances are transparent, but as soon as an alkali is added to the transparent oil, it converts the fat into soap and bleaches the substances above named, and the result is a white opaque emulsion. The white of an emulsion is the refuse we eliminate. In the manufacture of Codliver Glycerine, the true color of the bile matter diffused through the oil, is brought out by the change when the oil surrenders its active medical principles (morrhuine) and our factory refuse assumes the natural bile color, due to the stain of bile-pigment. Codliver Glycerine Co., St. Louis and New York.

In the treatment of Nervous Diseases and General Debility, McArthur's Syrup Hypophosphites demonstrates its restorative powers. Here it is not the stimulating action of the remedies usually classed as tonics that is needed. The organic powers of the system are already taxed to their utmost ability to carry on the physiological processes of life. The Hypophosphites of lime and soda gives the much-needed effect in these conditions—not that of a stimulant by irritation, but that of a true nutriment to the starving tissues. Its tonic effects are permanent as they are the effects of a richer blood supply, bringing healthy food and oxygen to the tissues. Thus the patient is gradually brought up to his normal condition.

W. H. Cunningham, M. D., Butler, Ala., on Nov. 15th, writes:

"I have been using "Papine" for about a year. It is not only retained in the most irritable conditions of the stomach but will also control nausea and vomiting with more certainty than any other remedy. Even in acute Gastritis it controls the vomiting better than Morphine hypodermically. A number of ladies in my practice cannot take Morphia on account of nauseating after-affects. The Papine has never in a single instance produced any unpleasantness. As an anodyne for children (from two months up) it is simply inimitable. Permit me—without solicitation—to express to you my thanks for the production of a remedy so useful, and in many instances absolutely indispensable.

We have only one fault to find with paskola, and this fault we do find with all predigested foods, and that is their presentation to the public for use without professional advice.

The doctrine of evolution reminds us that nature does not tolerate any useless parts, and that use is the absolutely necessary condition for the survival and continuance of any person or part of a person. The stomach is no exception to this rule, and it is with a feeling of general anxiety that we find predigested articles of food offered to the public. The very torpor and inactivity of this organ, which must result, will, we fear, have a tendency to gradually evolute this most important organ into lesser and still more less condition of functional power.

We are quite confident that if anything derogatory to paskola has been said or published, that such has been done unjustly and from unworthy motives, and we say this because of practical experience with this article.—Annals of Hygiene.

I received in due time and in good order, a sample of your Pineoline (Walker). My special reason for wishing to test its virtues was in a case of obstinate Mucus Irritation of the Urethral Tract. I have given Pineoline a fair trial in a case by lubricating the Catheter when used. The unirritating and healing effects of the medicine had the desired effect, for which I am greatly pleased. I have used it in irritating skin diseases and found its action decidedly satisfactory. Your Pineoline must take a front rank in the treatment of those diseases for which it is recommended.

J. P. COWLES, M. D. Hartford, Conn.

To the Walker Pharmacal Co., St. Louis, Mo.

LISTOL CRAYONS.

1. R. Listol gr. lxxv.
Oil of vaselin, q. s.
Dissolve and add
Gum arabic,
Glycerin, q. s.
Make five crayon,, three centimeters long.

LISTOL OINTMENT.

R. Listol.
Lard, aa gr. lxxv.
Lanolin, drachm x.

SOUTHERN CALIFORNIA PRACTITIONER.

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ORIGINAL.

ANNUAL ADDRESS.*

BY GRANVILLE MACGOWAN, M.D., LOS ANGELES, CAL., PROFESSOR OF DISEASES OF THE SKIN AND GENITO-URINARY ORGANS, MEDICAL DEPARTMENT, UNIVERSITY OF SOUTHERN CALIFORNIA.

It is customary for your presiding officer, when retiring at the close of his term, to address the society upon some topic, not necessarily medical in its character, but bearing upon or connected with the welfare of the fraternity. Sometimes a subject is chosen which is of interest to ordinary lay-citizens. Not infrequently reasons why quackery should be abolished are adduced by the learned gentleman making the address.

I have chosen rather to review the medical work of the world during the past twelve months, selecting such work only as has been newly introduced or been upon its crucial trial during the year. A century or more ago, without the refined therapeutics of to-day, with the influence of Hahnemann and modern tasteless pharmacy upon it, the autocratic doctor, making his own medicine from the crude products of nature, gave his patients some very curious doses. They were not in those times called animal extracts, but they were simply designated by the good old English and Latin names descriptive of the substance or the part from which they were derived. They knew nothing of physiological experiments, which indicated that in order for man to possess courage it was necessary for him to consume constantly quantities of that organ from which courage was derived. They knew not by physiological experiment that for a man or woman to be prolific it was necessary to keep up an abundant supply in the tissues of spermine. They knew not by physiological experiment that the man who ate the most brains had

*Read before the Los Angeles County Medical Association, January 4, 1895.

the most brains. But, nevertheless, they proceeded upon the assumption that each organ controls some psychological or physiological action, and that the use of this organ derived from the animal most noted for the possession of the desired qualities, was useful medicinally to make up for the loss or lack of the possession of these qualities in an individual of the human species, provided they were administered to him. The testicles of the bull and of the ass entered into preparations for the increase of sexual vigor. The heart of the tiger, when dried and pulverized and taken in small quantities, constituted, as it does today in China, a most valuable remedy for that lack of courage, or heart, for which many humans are distinguished. No definite use was made of the thyroid glands. But for one thing or another the bones and muscles, the livers, lungs, testicles and ovaries, wombs and penises, skin, hair, nails and glands, and feathers and eggs of the various animals, either raw or dried, entered largely into use for their alleged remedial qualities.

It is curious that at the end of this century of progress we should have returned to these old fads, using them in a more refined manner. No class of men is more susceptible of being gulled by its own members than is the medical profession. We are imbued with a desire to see the remedies which we prescribe for our patients succeed in curing them of the disease, real or alleged, of which they may be possessed. We all want to be magicians, and we all forget how great is God and that Esculapius is his unworthy prophet.

The fact that a member of our profession, who, by dint of work and force of talk, has won his way to the front, recommends some peculiar unknown or unheard-of thing, or some familiar but untried agent, for the cure of a disease, introduces it with a great flourish to the profession, lauds it as a specific, and braces up his pretensions by numerous laboratory experiments reported as made by himself and his assistants, is quite sufficient for the most of us to immediately order some of this material and commence experimenting with it. We are always looking for something that will cure those diseases which our pathological knowledge (if we have any) should convince us are not to be cured. We are always looking for some measures which will restore to the aged the powers of youth, when we know in our own hearts that the seal of nature is placed upon the secret, and that it never will be broken. We welcome the man who holds out to us the hope of making ourselves a little bit more God-like by being able to conquer just a mite more of the mystery of creation.

Koch, Pasteur, Kitasato, Tezzoni and Roux worked for years to discover the causes of anthrax, diphtheria, glanders, rabies and tuberculosis. To Pasteur is due the knowledge that the bacillus which produces anthrax carries with it the remedy which will prevent or inhibit its own action upon animals not yet its subjects. After many years of work he made the application of the same knowledge powerful in the treatment of rabies. Then began experiments by his pupils upon the bacillus of diphtheria. It is held that these bacilli, by their life or death, produce in the tissues certain alkaloids known as toxines, and that it is not the bacilli, but their toxines, which cause the fatal results of the disease. It is claimed that by the therapeutic use of these toxines upon certain animals, by injecting them beneath their skins in a certain well-described and thoroughly scientific manner, that after a time sufficiently definite, the injection of these toxines will no longer cause any distinct symptoms, and that then the serum of the blood drawn from the veins of these animals, most usually horses or goats, and which is called anti-

toxine, will, when injected into the skin or tissues of an individual suffering from diphtheria, cause an abatement of the symptoms and disappearance of the disease. Many experiments have been made during the past year in France, Germany, England and America with the use of this anti-toxine, and most astonishing results have been claimed for it. We have all seen the rise and fall of remedies alleged to be specifics in the treatment of other diseases of a zymotic nature. We have witnessed the enthusiasm of a world, medical and lay, over the tuberculine of Koch, which, useful in some few instances, gave rise to the most bitter disappointment both in and out of the medical profession. It is only a few years since tuberculosis was cured, and enormous statistics were produced to show it was cured, by the rectal injection of sulphuretted hydrogen. The statistics were collected by the most careful and competent physicians in the world. We have read the various reports made since 1890 by Bering, Kossel, Ehrlich, Roux, Yersin, Aronson, and more recently by Louis Fischer, American Journal Medical Sciences, January, 1895, and Bokai of Buda-Pesth, British Medical Journal, November 3, 1894. From a careful analysis of the reported cases and their results I have come to the conclusion that we are to see repeated in the history of anti-toxine that of its precursor, tuberculine. If it were a specific in diphtheria it would cure, unaided by the usual treatment, if not all cases, at least nearly all cases. We know that it does not. It has not even been satisfactorily proven that the bacillus Klebs Loeffler is truly the cause of diphtheria. It has not been proven that the injection of immunized serum has ever cured the disease, for it has never been depended upon entirely in the human for its cure. It has, however, been satisfactorily established that the alleged immunity produced by the injections does not continue for any definite time; the immunized individual remaining, as is ordinarily the case, more susceptible to the disease.

A remedy which has been on trial during this year has been the extract of pancreas, which about a year ago was so lauded to the skies by some English physicians as a remedy for diabetes. Extended use of it has proven that the extract of the organ so frequently diseased in diabetes will not cure it, but, on the contrary, its use has in most cases acted decidedly detrimental to patients.

Certain Italian and French experimenters, desirous of fame, have prematurely rushed into print headlong. They have claimed that tetanus may be cured by the hypodermic injection of its anti-toxine upon the appearance of the first symptoms. Upon the names of these individuals, experiments in the same line have been made by other operators, but so far nothing encouraging to the victim of lockjaw can be found in their results. In all instances where the individuals recovered from the disease they had been most freely dosed with those remedies which act as depressors of the anterior columns of the spinal cord. Numerous experiments in all quarters of the world with thyroid extract in myxedema have been made. It is well proven that this substance is a remedy of value in all cases of this rather rare and very hopeless disease. It seems from the mass of recorded reports that though it does not have a positive curative effect, it still restores the vitiated organs of the body of the victim of the disease to their former functions, and retains them in this condition so long as its use is kept up. It was thought that this extract would also prove valuable in other thickened conditions of the skin, such as obtained in psoriasis, ichthyosis, scleroderma, and in diabetes. But the consensus of opinion is that it is not only of no value, but

frequently proves of decided detriment in these diseases, by reason of its causing disagreeable symptoms, such as tremor, syncope, and general exhaustion.

About a year ago the permanganate of potassium was introduced as an antidote for poisoning by morphine or opium. Its use was advocated extensively by certain writers, and it was extolled in the magazines as a sure and certain remedy in these cases. It is well known that all vegetable alkaloids are readily decomposed by powerful oxidizing agents; the greater number of these agents are poisonous, and may not be administered in too concentrated a form. The most powerful of them all is permanganate of potassium. It is well known that almost all morphine which may have entered the system returns to and is excreted by the glands of the stomach and of the intestines, and that from here it is again absorbed and goes its round through the circulation, and is again re-excreted. From this rises much of the danger of poisoning by morphine, in that it constantly re-enters the system. Now it is reasoned that permanganate of potassium, being a powerful oxidizing agent, will destroy morphine. It does, when coming directly in contact with it. It acts beautifully in the laboratory; but permanganate of potassium is an agent which, when used in strong solution, will destroy the walls of the stomach, hence it can only be used in weak solutions. It may not be introduced directly into the blood so as to come in contact with the morphine circulating in the blood, for such an agent will destroy the blood by decomposing it. I know personally of its use in but two cases. One of these cases apparently recovered, but suddenly died a few hours afterwards. The second case, I believe, had about the same history. In the first case the permanganate of potassium was not used alone, but its use was accompanied by cardiac stimulants, and, I believe, preceded by apomorphia. The second case, a member of this society will describe more fully to us. It is used in solution of the strength of ten to fifteen grains dissolved in six to eight ounces of water. This amount is given every thirty minutes for four or five doses. It may be useful in conjunction with other measures, but it certainly should not be relied upon for the treatment of morphine poisoning.

Methylene blue has been extensively experimented with during the past year in the treatment of malarial fever. It has won for itself the position of a useful drug in certain cases of this fever which are not amenable to either arsenic or Peruvian bark. It is used in doses of two or three grains, in capsules, two or three times a day. Further experiments with this agent in the treatment of malignant growths have rendered the sanguine expectations for it as a useful active agent extremely doubtful.

Hydrotherapy has advanced in favor for the treatment of typhoid fever. It seems really probable that the method of Brandt will be almost exclusively used in hospitals within a very few years. Two useful hints to surgeons are held out in the use of the spray of a 2 per cent. solution of antipyrine in the capillary oozing, which is so troublesome in extensive operations; the use of peroxide of hydrogen in the same manner and for the same purpose has been tested, and it has been found that it can be highly recommended.

The tendency of the day is towards the abandoning of the use of the stronger antiseptics which coagulate albumen, such as solutions of sublimate and carbolic acid, and the taking up of solutions which seem in their effect upon pus bacteria to be as powerful, and at the same time their effect upon both instruments and hands not so destructive as that of the agents used ordinarily for antiseptic purposes. Those which are in greatest favor are the

solutions of oil of cinnamon, 1-500, and trikresol, 1 per cent. At the strength of 1 per cent. it is the antiseptic equivalent of a 5 per cent. solution of carbolic acid; does not coagulate albumen and does not benumb or irritate the fingers.

Strychnine, mainly through the efforts of Australian physicians, particularly Dr. Macher of Victoria, has become the remedy in cases of poisoning from snake bite. Macher was bitten by a venomous snake, and, reasoning that snake-poisoning acts by inhibiting or paralyzing the anterior columns of the cord, and the vaso-motor centers, was impelled to use the drug hypodermatically in the treatment of himself, and was successful. He afterwards had occasion to treat a number of other people in the same manner, and with similar success. He advises in its use to commence with one-third grain doses, hypodermatically, and cautions that every ten or fifteen minutes an additional dose of one-twelfth to one-twentieth of a grain should be given until the symptoms of strychnine-poisoning begin to appear. They will not appear so long as the snake-poisoning is dominant, but the patient must be kept constantly awake. The tendency of the snake-poison being to renew its energy, inhibited for the time being by the strychnine, if the individual is not carefully watched and the treatment kept up or renewed at the first sign of approaching drowsiness, he will die.

The surgical world has gone on inoculating, in hospital practice principally, malignant neoplastic growths with cultures, or toxines, of the bacillus of erysipelas. The reports are certainly very favorable in cases of sarcoma, and just as unfavorable in cases of epithelioma. Several curious and, withal, useful discoveries have been made in surgery. The first is that rhythmical traction of the tongue in cases of asphyxia will restore the person to life, and second, similar traction in hysteria will have a curative effect frequently after all other means have failed.

Probably the most important of all things presented to the profession during the year is the operation of castration for the cure of hypertrophy of the prostate in the aged. This operation was reasoned out by that prince of American surgeons, J. William White of Philadelphia, who, after proving in his laboratory by experiments upon dogs, that the removal of the testicles in a short time caused atrophy of the prostate, suggested to the surgical world the use of this measure for the relief of these cases, dangerous and untractable under ordinary measures.

No. 321 South Broadway.

CEREBRAL TUBERCULOSIS.*

BY H. G. BRAINERD, A.B., M.D., LOS ANGELES, CAL., PROFESSOR OF DISEASES OF THE MIND AND NERVOUS SYSTEM, MEDICAL DEPARTMENT, UNIVERSITY OF SOUTHERN CALIFORNIA.

It is difficult to obtain statistics of the frequency of cerebral tuberculosis. In some reports of English hospitals, covering autopsies of two thousand children below the age of 10 years, nearly 10 per cent. were found to have some form of cerebral tuberculosis. Some American authorities have estimated that one-fourth of all children dying below the age of 10 years in this country have tuberculosis. If the same ratio of cerebral involvement exists as in England, there would be about 8 per cent. of cerebral tuberculosis in this country.

*Read before the Southern California Medical Society held at Pasadena, December 5 and 6, 1894.

In adults it is certainly a rather rare occurrence as compared with its frequency in childhood. In over six hundred cases of tuberculosis in adults that came under my care from 1889 to 1893, there were only five cases of marked cerebral involvement. I believe that it occurs more frequently than those figures would indicate, but when developed in a patient far advanced with lung or joint tuberculosis, its symptoms are so overshadowed by the pre-existing condition as to escape detection.

Osler says that tuberculosis of the brain occurs:

1. As an acute miliary infection, causing meningitis.

2. As a chronic meningo-encephalitis, usually localized, containing nodular tubercles.

3. As the solitary tubercle.

Of these the first mentioned is by far the most frequent. The tubercles are deposited in the perivascular sheaths of the vessels of the pia mater. In children this deposit and the subsequent meningitis is usually basal, but in adults it may be of the convexity. In some cases evidently the deposit of tubercle has existed for months previous to its setting up a meningitis.

The clinical picture of a typical case is usually a striking one. A child with a tubercular family history, and perhaps having some evidences of tuberculosis itself, becomes fretful, peevish and irritable, and if old enough complains of severe, paroxysmal headache, and sleeps and eats poorly. This condition continues for a few days, or even weeks, then fever is ushered in, with convulsions or explosive vomiting, and the headache and all the former nervous symptoms are exaggerated, with the addition of the hydrocephalic cry, rigidity of the neck and intolerance of light and noise, pulse irregular or slowed below normal, even when there is considerable fever, strabismus and paralysis of other cranial nerves, stupor deepening into coma, and ending in death in two or three weeks from the outset. The cases of which I shall give you a brief history differ somewhat in either the course, symptoms or duration from the typical case which I have pictured.

Case I. A. H., aged 8, schoolboy, no tubercular history, was apparently in good health when illness began. After ailing slightly for about two weeks was obliged to come home from school on account of severe headache, and seemed so ill that a physician was sent for. On being asked as to any injury to the head, he recalled that about a week before a playmate had thrown a stone which hit him a little above and posterior to the right ear, but had not been severe enough to cause him to make complaint at home or at school. In a few hours he developed fever, vomiting, intolerance of light and noise, sleeplessness, which gave way to a stupor, loss of vision, dilated pupils, and at the last, paralysis, Cheyne-Stokes respiration, and death within three weeks of the injury. Autopsy eighteen hours after death: no evidence of any injury to scalp or skull from the blow from the stone; the pia mater intensely injected, especially in the right parietal region; pearly exudate thickly studded with miliary tubercles at the base, and also in the region of the sylvian fossae. Evidently there had been a deposit of tubercle in the meninges long before the onset of the disease, but it had been in a latent condition until aroused into activity by so trivial an injury as the slight blow on the head which the lad received. I think this case enforces the fact that many cases which seem to be simple meningitis due to traumatism are really due to tubercle.

Case II. Rose T., aged 16, admitted to County Hospital April 9, 1890, with the following history: Family history good, and had enjoyed good health

previous to present illness. In June, 1888, was obliged to give up going to school on account of persistent headache, which continued with perhaps some remissions until about the middle of August, when she had great increase of pain in the head, explosive vomiting and fever, which kept her in bed three weeks, and was called typhoid by her attending physician. She convalesced but imperfectly from this, having a little fever at times, but was able to ride to town and back, a distance of sixteen miles, half a dozen times in the succeeding four months, when she became so feeble that she was confined to her room and most of the time to her bed, for several weeks, with symptoms much the same as in the illness in August; she again slowly convalesced, so that in May, 1889, she had improved sufficiently to make several trips to town to consult a physician, and remained under his treatment until October 1889, when she again became too feeble to leave her home. The headache, rigidity of muscles of back of neck, with occasional explosive vomiting and exacerbations of fever, which had persisted with some remisssions ever since their development more than a year before, became more pronounced. She became very deaf, but in a few weeks there was some improvement in her hearing. Early in January, 1890, she had a general convulsion, which was followed by fifteen or twenty more during the succeeding three months. From this time on she failed rapidly, vision became impaired, saw flashes of light, at times everything seemed red, yellow or black, and in February became totally blind. The strength of the lower limbs failed rapidly after the convulsion in January, 1890. After her admission to the County Hospital she presented the following symptoms:

Emaciation extreme; lower limbs completely paralyzed, but rather rigid; can move upper limbs, but there is marked tremor and unsteadiness; muscles of back of neck rigid and painful; appetite fair, but occasionally has explosive vomiting; bowels are moved only by cathartics or enemata; urine scanty and loaded with phosphates, and has to be drawn with a catheter; tongue heavily coated, and can be protruded but a little, no lateral deviation; pulse varies from 100 to 140, and temperature from 99.5 degrees to 102.5 degrees, usually highest in the evening; total loss of vision; eyes full and prominent, pupils widely dilated, but no ptosis or strabismus; ophthalmoscope shows double optic neuritis; hearing greatly impaired in both ears; smell and taste fairly good; answers questions intelligently, but is dull and apathetic; complains at times of severe pain in head, dizziness and a sensation of falling; has occasional attacks of unconsciousness, some of which are attended with facial spasms. Percussion and auscultation shows slight consolidation of apex of left lung; she has a little cough, but expectorates nothing but frothy mucus. May 5, 1890, she died in a convulsion. Autopsy, twelve hours after death; convolutions of vertex compressed and flattened, great amount of cerebro-spinal fluid, and as the infundibulum was torn across, the fluid spurted out in a fine stream to a distance of a foot or more; the basal pia-arachnoid membrance was gelatinous, opaque, and of slightly greenish tint, and thickly dotted with miliary tubercles, and at the base varied from one-eighth inch to one-fourth inch in thickness. This condition of the membrane extended above the sylvian fossae on both sides and down over the pons and medulla into the spinal canal. The pituitary body was unusually firm and hard and twice the normal size, and I think was infiltrated with tubercles. The ventricles were distended with a fluid that was slightly opaque, and the venous sinuses were enlarged and distended with blood.

This case, on account of the long duration—nearly two years—of the cerebral symptoms, headache, vomiting, convulsions, paralysis, loss of vision and impairment of hearing, with double optic neuritis, was supposed to be one of intracranial tumor in the posterior fossa of the skull, and because of the fever, retraction of head and pain on motion, the additional diagnosis of circumscribed meningitis due to the tumor was made; but the only evidence of tumor to be found was the enlarged pituitary body—and the case was evidently one of tubercular meningitis from the start, confined to a small area at first, with subsidence of the acute symptoms, on two occasions, but extending with each exacerbation until the fatal ending.

At the time of making this autopsy, I could find no reference in the standard authorities of the similarity of chronic basal meningitis and intracranial tumor; but more recently Strumpell, Osler, Whittaker, Gowers, Dana, and other authors, call attention to the fact that the sympoms of chronic basal meningitis are similar to those of cerebral tumor.

Case III. G. W., age 47, physician; mother died of some obscure bowel trouble, which may have been tubercular, but otherwise family history good. In February or March, 1893, had an attack, supposed to be la grippe, from which he did not thoroughly convalesce; suffered constantly with pain in forehead and in and about right orbit, with occasional exacerbations that were excruciating; slept but little, and in morning frequently had dizziness, nausea, and occasionally vomited; appetite poor; was too ill to attend to his professional work, as any mental exertion increased the pain in his head. In the latter part of May came to Los Angeles, and came under my observation. He had lost ten pounds in weight; usually had a little rise of temperature in afternoon, but in the morning it was subnormal. There was slight dullness in left apex, with slightly prolonged expiration; occasionally he coughed a little in the morning, but there was little or no expectoration, and I did not succeed in finding any bacilli in the little flecks of sputum which I obtained on two occasions. He suffered from constipation, and also a mild catarrhal enteritis. The ophthalmoscopic examination by Dr. Babcock showed a slight hyperemia of the retina, but no evidence of tubercle in the choroid, or of choked disk.

During his stay in Los Angeles he gained in weight, and though the headache did not entirely leave him, he was free from it for hours at a time, and it was no longer so severe as to unfit him for business. He returned home the last of June, and resumed his work, getting along very comfortably for several weeks, but, after a hard day's work in early August, had an attack of unconsciousness with tonic spasm, which lasted a couple of hours before he recovered sufficiently to move or speak. Following this the pain in his head returned worse than ever, and was more general than before, extending sometimes into left side of face and to the vertex.

After returning to Los Angeles early in September, he had a number of these attacks of sudden unconsciousness, usually accompanied with rigidity of the limbs, most marked on the left side. Headache was intense at first, but less severe in the latter part of his illness; explosive vomiting frequent; great unsteadiness in gait at times; became forgetful and absent-minded, and soon failed to recognize his surroundings, and oftentimes his acquaintances. For a few days was mildly maniacal; talked excitedly and incoherently; thought he was being poisoned, and tried to run away, running a couple of blocks until he fell exhausted. About ten days before his death he had a convulsion, following this his left side became rapidly weaker, until it

was completely paralyzed; he sank into an unconscious condition; Cheyne-Stokes respiration supervening a few hours before death, which occurred December 19, 1893. Autopsy twelve hours after death: There was a large amount of cerebro-spinal fluid; right hemisphere slightly edematous and more flabby than left, membranes easily separated from cortex; the pia-arachnoid membrane had an opaque, pearly appearance on the right side of optic chiasm extending up the right sylvian fissure, and was thickly dotted with miliary tubercles; at the point at which the sylvian artery branches was an irregular tubercular mass about three-fourths by one-half inch in diameter, embracing the artery and nearly obliterating its caliber by an endarteritis. In the immediate neighborhood of the mass there was a zone of decided cortical softening, and the whole area supplied by the right sylvian artery showed evidences of beginning softening, which was evidently the cause of the left hemiplegia and the immediate cause of death.

The two last cases show that there may be prolonged remissions in the course of cerebral tuberculosis, but whether due in any measure to treatment is doubtful in my mind.

Solly of Colorado has reported a case of cerebral tuberculosis, secondary to marked pulmonary involvement, which he believes was cured by the use of tuberculin injections. This case as reported lacks the confirmation of an autopsy, and is, so far as I can learn, the only recorded case of recovery reported. And I must confess my scepticism of the permanence of the cure, if indeed it really were a case of cerebral tuberculosis.

Case IV. J. H., age 43, clergyman; one brother tubercular. Troubled with serious naso-pharyngeal catarrh for some years. In 1890 had la grippe, and ever since has been greatly troubled with headache, and has been gradually failing in health. A year ago lost his voice. In April, 1894, had several attacks of vomiting and unconsciousness, lasting from two to fifteen minutes each. Since then there has been paralysis and atrophy of left side of tongue, left ptosis gradually growing more complete; dilated pupil; slight strabismus; difficulty in swallowing; and great difficulty in even whispering. For several weeks he vomited almost incessantly, and the paroxysmal pain about the left orbit was excruciating. He became rapidly emaciated, was obstinately constipated, ate and slept but little. In June had a severe general convulsion, and has had a dozen since. A few weeks ago tubercle bacilli were found in his sputum by Dr. Cole, which made the diagnosis probable that the multiple lesions from which he was suffering were tubercular instead of gummatous, as had been suspected from the tolerance and relief obtained from massive doses of iodides and mercury. He died November 30th, and an autopsy made the following day showed a wet brain with venous sinuses enlarged and engorged with blood. Springing from the dura mater was a growth which pressed upon the medulla and involved the exits of the left ninth, tenth and twelfth nerves; anterior to this was another mass of the same character which presssed upon the left Gasserian ganglion and the left third nerve. These growths would account for the throat, tongue and eye symptoms and the pain; but they were not extensive enough to have been the direct cause of death, but probably were the indirect cause, from the exhaustion from pain which they caused, and lack of sleep and nutrition. The growths were probably not tuberculous nor gummatous, as they were not formed in the perivascular spaces, but sprung from the dura mater, and had the appearance of sarcoma. This case was detailed before the autopsy as probably one of tuberculosis, judging from the history of the case; the evident multiple

lesions and the finding of tubercle bacilli in the sputum; but the findings at the autopsy would not seem to warrant that diagnosis.

No. 701½ South Broadway.

THE MODERN ACCOUCHEUR.*

BY C. S. STODDARD, M.D., SANTA BARBARA, CAL.

The year 1894, the last year of the Christian era, should, and does, surpass all the historic years that have preceded it in all that pertains to the elevation and Chrisianization of the human race.

If we continue our comparisons we may with equal fervor and confidence declare that in all those departments of scientific attainment which have to do with the amelioration of human suffering, the saving and prolongation of human life, we stand today pre-eminently above our predecessors in the centuries passed, having the experience of the past to aid us, and availing ourselves of all that has gone before, it would be strange, indeed, should we not progress toward a higher and more perfect knowledge of disease, its prevention and its cure.

While this is true of medicine and surgery in general, the inquiry very naturally arises, Has the science and art of obstetrics kept pace with the progress made in other departments of our profession?

While I am disposed to answer this affirmatively, a conscientious regard for truth compels me to say that from its very nature and limitations, the conquests and victories have not been as many, and as brilliant, as in the department of surgery, yet we have reason to congratulate ourselves that in the domain of obstetrical therapeutics, asepsis and antisepsis, great advancement is being constantly made, and the mode of obstetrical procedure differs therefore in many respects from that of the past.

We have attained a position in the practice of obstetrics where we can with common consent declare that "Cleanliness is next to godliness," and its neglect a crime against our common humanity.

We cannot today, in the time allotted us, review the entire field included in our subject, but desire to briefly touch upon a few points which our own experience and observation have impressed as important, not so much respecting obstetrical operations, as concerning the minor details which enter into the every-day life of the accoucheur.

Personal cleanliness is a consideration of primary importance. It seems almost superfluous to say that the physician should be a man of clean hands, both in a moral and literal sense, and no man or woman entrusted with the sacred responsibilities of the parturient chamber is excusable for assuming such duties with unwashed hands or finger-nails in mourning. There is no more prolific source of infection than long, dirty finger-nails, which are an abomination in polite society and pestilential in obstetrics; and I would here commend as a safe rule for the guidance of the laity, refuse to employ in surgery or obstetrics, and shun as a leper, any physician whose appearance would indicate a neglect of personal cleanliness. The nail-brush, and a fine quality of aseptic soap, should constitute a part of the armamentarium of every modern accoucheur. Thorough cleansing and scrubbing should, however, be considered only as a preliminary step to thorough disinfection by the bichloride solution, ever present, through which the examining hand should always pass before coming in contact with the parturient tract.

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Another blessing vouchsafed to the parturient female of today is anesthesia. That cruel sentiment, born of ignorance and nurtured in the school of prejudice, that because labor-pains are natural they should be endured, has finally given way to the just demands of suffering women, until today child-bearing has in a great measure been robbed of its terrors by the knowledge of the blessed influence and harmless effects of chloroform.

I am more and more convinced of the importance of the physician's care of his patient during the period of gestation. If physicians do not express themselves upon this point, we cannot blame the laity for not giving the subject proper attention. How often have we been called to a case of labor, and found our patient in a condition so favorable to the development of dangerous complications that we have instinctively reprimanded the husband for not engaging his physician months before, and thus having his wife under professional care. It has been my custom for years, where the opportunity is afforded by a timely engagement, to visit my patient occasionally during the latter months of gestation to determine as to her general health, the condition of the various functions of the body, the ability to sleep, state of the nervous system, and the mental condition as well, all of which have an important bearing upon the parturient period.

Morning sickness is often borne patiently, under the impression that it is "natural." This is in keeping with that old-fashioned but false argument, which once so strongly opposed the administration of chloroform in the second stage of labor, that because the pains were "natural" they should not be interfered with, but patiently endured, regardless of suffering and exhaustion. The period of gestation at best is hard enough to endure, and we should employ every means in our power to relieve its burdens. There are few cases of morning sickness that will not yield to the employment of such agents as ingluvin, oxalate of cerium, menthol, cocaine, and other stomach sedatives; but where these fail, weekly applications to the cervix of the tincture of iodine, carbolic acid, or other mild caustics, with the daily use by the patient of a vaginal capsule containing a tampon of absorbent cotton saturated with a solution of boro-glyceride, almost invariably yield good results.

Should constipation exist, a gentle tonic laxative is prescribed, and regularity maintained. The function of the kidneys are especially considered, and the urine occasionally tested for the presence of albumen. If there is any neglect of attention to the skin, the necessity for frequent baths is impressed upon the patient.

The moral and social influences surrounding the patient, while not always within the province of the physician to change or modify, should not be lost sight of, and, as far as practicable, made to conduce to the highest interests of the human being in utero, which, according to physiological and psychological laws is to a degree susceptible to these outward influences on the part of the mother. A disconsolate condition of mind, a state of fear and apprehension, a life burdened with care, anxiety or affliction, will as surely be reflected in the child, as is feature, form or color; hence the physician has to some extent at least, the formation of the character, temperament and mental propensity of the unborn generation.

There often exists in the minds of young mothers fears and apprehensions of all sorts, engendered by meddlesome old women, who seem to think their great mission upon earth is to relate to these susceptible creatures all the horrid tales of midwifery they have ever heard, and, as a consequence, the poor woman expects some great calamity to happen in her case. If the physi-

cian cannot prevent the visitations of this class of females, he can at least counteract their evil influence in a measure, and place his charge in an attitude of mind not to be disturbed by their unholy gossip.

Many women suffer from edema of the lower extremities during the latter period of gestation, which may be due simply to the mechanical interference of the gravid uterus with the venous circulation, and, therefore, not of serious moment, but how often young mothers are assured by these ever-present old wise-acres that it is an inevitable consequence of pregnancy, even though general anasarca may be present, when the fact is, the unsuspecting patient has serious renal trouble, which the careful physician would regard with apprehension, had he an opportunity to investigate her condition, and would lose no time in correcting it, if possible, perhaps thereby forestalling a fatal complication. Albuminuria and uremia are often the primary causes of many cases of eclampsia and hemorrhage, which might have been averted had the physician been engaged three months before the parturient period.

The timely selection of a competent nurse is another important preparatory measure, which cannot be too strongly urged upon the attention of the family. The too prevalent idea among the middle and poorer classes that the presence of some female during the hours of labor, and for a brief time each day, fulfills all the requirements, should be contradicted, and, when possible, an experienced nurse should be engaged. I am happy to say that this demand upon the part of the profession is at the present day fully supplied in all our cities by competent nurses, who have elevated their vocation to the rank of a profession, and are worthy of our confidence.

The obstetric case of today is provided with not only the instruments formerly carried, but with all the remedies and appliances approved by modern obstetric art, and should be always in readiness for the midnight call. Those who have experienced the chagrin of being unprepared, when hurriedly called to act in some desperate case, will readily appreciate the well-filled obstetric case that can be grasped with confidence in any emergency.

I recall with a shudder my first case of obstetrics: It was in March, 1874. The hieroglyphics, or alleged signatures of the faculty, were scarcely dry upon my diploma; and my first shingle looked so bright and new that I watched anxiously for the elements to leave their impress upon it, that it might not appear quite so fresh to the beholder.

I was called six miles into the country, one winter evening, to see an old lady patient, and before I was ready to return, one of those terrible blizzards suddenly arose (known only to the inhabitants of Minnesota and the Northwestern States,) which prevented my return for three days.

While waiting for the storm to abate, I was called to attend a neighbor's wife in confinement. I found a primipara in the second stage of labor, with a shoulder presentation and arm in vagina. I was informed by those in attendance that she had been in labor twenty-six hours, and that she had been having convulsions as often as every twenty minutes since the time of the first pain. My patient was, of course, in an unconscious and exhausted state, and I—in a state of bewilderment. I had scarcely time to take in the situation before one of those terrible puerperal convulsions occurred, which I witnessed in painful silence, as one witnesses a drowning man but is powerless to render assistance. Turning to my little pocket vial case, I eagerly scanned its contents, but it contained nothing with which to meet the indications, except the tinct. of gelseminum. This I administered with much difficulty. How I longed for my hypodermic syringe, for chloroform, and for counsel of

older men, but none of these were obtainable. I then performed version, and delivered her, as soon as possible, of a dead infant, after which the convulsions ceased, but my patient never recovered consciousness.

I gave it as my opinion that she would live until 12 o'clock the following day, and as she passed away at exactly that hour, I was regarded as authority on obstetrics in that neighborhood ever after.

It has been by custom ever since that terrible first case to be provided with chloroform, a hypodermic syringe, hydrate of chloral, and stimulants, and to be at the bedside of my patient as soon as possible after being summoned, prepared to meet any emergency that my first examination may lead me to anticipate.

The parturient chamber is a consideration of no small moment, and when a choice can be made should be selected with due regard to warmth, light and ventilation, and away from the noise and excitement of the household. In this semi-tropic climate, where so little attention is given to means of warming our chambers, and so much dependence is placed upon solar heat, we should select apartments having windows looking to the south or west, and this to be supplemented with artificial heat when the temperature falls below 70 degrees Fahr.

The bed should be so placed as to be accessible from both sides, and to avoid drafts from windows or doors. Its internal arrangement is a matter of no little importance, both with reference to the safety and comfort of the mother, and also the preservation of the bed and economy of labor; and the physician is in a large degree responsible for its preparation. In answer to our inquiries respecting the bed, we are too often informed by the over-officious nurse that the bed is all right; that she has made every preparation, and this bit of information is often given in such a hands-off tone that we are led next to inquire of ourselves whether we are in charge of the case or some one else. Upon investigation, however, we often find the preparation deficient in quantity or quality, and we should proceed to arrange to suit ourselves. I prefer a good hair or wool mattress as a foundation; this to be covered with a thick pad or comforter and clean sheet. Upon this is spread a white rubber sheet three or four feet square, and upon this clean absorbent pads of sufficient thickness to absorb all discharge—refusing everything not perfectly clean; and, when the third stage is complete, removing the rubber sheet and all its contents from beneath the patient, thus having preserved the bed unsoiled. The patient's hips may now rest upon a perfectly clean pad or folded sheet.

I find it necessary in order to carry out the idea of perfect cleanliness, to also personally attend to the preparation of the napkins to be applied to the vulva. If entrusted to the inexperienced female attendant, we often find them using soiled clothing, considering anything as good enough for this purpose, and, if not otherwise instructed, leaving these old rags in the bed for many hours, thus contaminating the atmosphere of the bed and breeding disease.

The physician's attitude in the parturient chamber is a matter of no little importance, and, simple as it may seem, scarcely two physicians are alike in conduct during these hours, so full of importance to the suffering patient.

I am confident that the aggregate of suffering during the act of labor might be greatly diminshed if physicians had less regard for those old, hackneyed ideas so often quoted, that natural labor should be let alone; that meddlesome midwifery is bad; that labor, being a physiological process, should not

be interfered with. I believe that too often upon these grounds excuse is made for duty neglected.

When a physician is employed in an obstetrical case, it is manifestly his duty to not only remain with his patient during the second and third stages of labor, but to guard her from all accident, so far as possible to lessen the degree of suffering, and conduct the case to a safe and speedy termination. It is not enough to simply ascertain by the first examination that labor is present, and the presentation natural. The examination should be made sufficiently often to determine the progress of labor, and assist as far as possible in the dilation.

Our patients, while passing through this painful ordeal, very naturally look to the physician for aid and encouragement. His presence is of no avail, in their estimate, more than any unprofessional attendant, unless he is more than a passive spectator. Even where no positive aid can be rendered, the physician should, for its moral effect upon the patient, assume to be employed, and at least manifest something more than a heartless indifference to the process before him. Well-directed sympathy, and an occasional word of encouragement to the long-suffering patient not only helps her to bear her trial with greater fortitude, but establishes the physician in the confidence of the patient as one possessed of some kindly feeling.

A prolonged first stage is probably one of the most frequent and most annoying features, with which we have to contend. This is frequently caused by the vertex impinging upon the anterior portion of the cervix, in which it is held as in a pouch, while the pains expend their force upon this segment of the cervix instead of in the direction of the os. Under these circumstances the elevation of the fundus with the left hand, and the hooking forward of the os with a finger of the right hand during a few pains, thus bringing the uterine axis to correspond with the axis of the superior strait, will render the expulsive forces more effectual, dilation more rapid, and much needless suffering is thereby avoided.

The administration of chloral hydrate in prolonged first stage from rigid os has for some years been a remedy of recognized value, but recently the coal tar preparations have in a great measure superseded it. The Western Medical and Surgical Reporter of recent date contains a report by J. B. Riley, M.D., of St. Joseph, Mo., of a series of twenty cases in which he adopted the uniform method of administering a full dose of antikamnia as soon as labor was announced by regularity of pains, the effect of which was satisfactory in the highest degree, in every case, lessening the lancinating pains and materially hastening the dilation. Vaginal douches of hot water, long continued, have also been found to exert a relaxing influence upon the os. My own experience corresponds with that of Dr. Riley. I have found antikamnia most satisfactory not only in labor, but also in the false pains approaching the time of labor, and in those troublesome after-pains which sometimes annoy a patient for days, being prompt in its action, free from the constipating effects of opium, and favoring, rather than interfering with, the lacteal secretion.

A prolonged and tardy second stage arises in a majority of cases from weak and ineffectual uterine contractions, or a disproportion in the size of the child and the maternal tract. Under the old system of practice the accoucheur sought to remedy this condition by the administration of ergot, but later experience has led us to regard this agent as positively dangerous to the child, and liable to retard the progress of labor by the induction of its peculiar tetanic contractions, and we reserve it therefore purely for uterine inertia

after the termination of the third stage of labor. As an energizer of uterine contractions, quinine, in 5-grain doses, hourly, for two or three doses, alternating with "leontin" (the active principle of blue cohosh) in half drachm doses in hot water, conjoined with firm pressure over the fundus, one or all, seem to meet this condition in a vast majority of cases.

Peltzer of Leipsic recommends the injection of sterilized, chemically pure, glycerine between the membranes (previous to rupture) and the uterine walls, whether for the purpose of establishing uterine contractions in the induction of premature labor, or for stimulating tardy and ineffectual pains at full term. Change of position from the dorsal to the lateral, or to the upright, while it affords to the weary mother a welcome relief of the monotony of labor, ofttimes serves as a corrector of some obliquity of position, and thus aids materially in the progress of labor. Viewed from the standpoint of the gynecologist, a complete perineum is of great value, as respects the future health and comfort of the mother, and the proper care of the perineum should distinguish the modern accoucheur from the ordinary midwife. Time is the great perineal protector, and almost any perineum will become safely distended if sufficient time is allowed. It must be admitted that a large proportion of perineal lacerations result from too hasty delivery with the forceps, before the perineum has time to dilate. We find a wide difference in the practice of physicians in the same community respecting the use of the obstetric forceps. Some physicians seem to have the misfortune to require the forceps in almost every case. Permit me here to most earnestly protest against this too prevalent custom, a practice which is most reprehensible in all cases, which may terminate safely by the unaided powers of nature, for he who is so greedy of time as to subject his patient to increased danger by the employment of artificial measures that he may thereby have more time to devote to others, or to personal gratification, would not scruple at spending many precious hours at the card or pool tables, and he who would resort to instruments for the purpose of adding to his fee, is too dishonest to be engaged in so sacred a calling, and fit only for gambling, and for devising schemes for defrauding his fellow-men.

Obstetric teachers formerly advocated the method of supporting the perineum by pressure with the palm of the hand, or by means of a folded towel, but the modern accoucheur, recognizing but little value from this method, gives his attention to the advancing head, maintaining a good degree of flexure until the vertex shall have escaped, and preventing its too rapid descent. At this particular period, when the integrity of the parts are the most imperilled, the mother in her desperation will often make strong expulsive efforts, and thus cause a laceration in spite of the efforts of the attendant to prevent. This should be anticipated, and the patient's mind so prepared in advance that she will willingly exercise a proper self-control, refraining from those efforts when informed by her physician that the critical moment has arrived.

Formerly, it was the custom to trust to nature the entire process of perineal repair, aiding her, it was thought, by bandaging the knees together and enjoining upon the patient the lateral posture; but the modern accoucheur is fully equipped to repair the damages sustained at once, and according to the most approved aseptic methods, thus obviating the necessity for a secondary operation, and all the ills which inevitably precede it.

Not the least among the duties of the accoucheur is the subsequent care and attendance of his patient. When we are told by a majority of our

gynecological patients that their troubles have existed since the birth of a certain child, we are driven to the conclusion that something was radically wrong with what should have been a physiological process. Something was left undone, or, as is often the case, was overdone, and this defect or excess should be corrected by greater attention to details on the part of the attendant.

The too hasty getting up after confinement should be positively forbidden, and its dangers fully explained. Many women seem to possess a foolish pride in outdoing some other women in this regard, and unless warned by their physician, will resume their accustomed duties long before they should, only to suffer from subinvolution or displacement for years afterward. The ninth day seems to possess some special significance with old midwives, and, regardless of conditions, they seem to take a fiendish delight in getting their charges out of bed on that day, relating with ridicule that the patients of Dr. Jones or Dr. Brown are always in bed two or three weeks; and the simple-minded patients thus addressed are often led to believe that it was indeed fortunate for them that they escaped this form of professional cruelty and malpractice by employing a midwife. The modern accoucheur will not consider his work complete, or his responsibility relieved, until his patient shall have safely passed that period during which puerperal complications are liable to appear, varying from five to eight days. And upon ceasing his visitations he will carefully instruct her regarding the dangers, and the remote consequences of too early assuming her accustomed duties. Then, and not till then, does his responsibility cease.

STRICTURES.

BY H. C. SAMPLE, CHICAGO, ILL.

Strictures of the urethra are due to a structural change of the tissues, permanently closing the caliber of the urethral tract. They may be caused by anything that would produce an inflammation. Dr. Sturgis says that no instrument should be forced into the urethra for any cause.

There are numerous methods in practice for the destruction of strictures, used with more or less success, viz., external urethrotomy, internal or dilating urethrotomy, simple dilation and electrolysis. The first two are somewhat ancient and are dangerous, besides giving a very small percentage of cures, as compared with dilatation, and the latter gives a small percentage, compared with electrolysis. Cure by electrolytic action has been repeatedly demonstrated by eminent men in this country and Europe. The spasmodic stricture is not benefitted by this agent, but is curable with the secondary faradic current (rapid interruptions) applied when the spasm comes on and continued until there is relaxation, which very soon occurs.

Treatment of strictures with medicine is useless. For the application of electricity one should have a complete set of olives, ranging from No. 13 to No. 35, French gauge; and it would be well to have three insulated on one side with hard rubber, I would recommend for this, Nos. 17, 22 and 26. All of these should fit on an inflexible insulated stem. One also needs a carbon rectal electrode, a six-strand needle-holder, a sponge-covered disc, and, finally, a good galvanic battery, capable of giving fifteen milliamperes through 500 ohms resistance.

It is best not to complete the circuit until the olive is in contact with the stricture (the positive pole may be placed on the back abdomen or thigh), then

connect the olive with the negative pole and increase the current by one cell at a time until five or six milliamperes are obtained. No force should be used in introducing the olive, but with gentle pressure the stricture will yield to the dilating influence of the negative current. After the olive passes the stricture freely, the next in size should be used at the same seance, provided it took less than ten minutes for it to pass, and your patient does not complain of severe pain, for you must always be on the lookout for increased inflammation, which may result from overtreatment.

In using the short olive, which is ball-shaped, but pointed at the end, for this work, the reader can readily see that when it comes in contact with an obstruction on one side of the canal, the point will be forced against the wall of the opposite side, and is thus liable to puncture it; it is, therefore, a dangerous instrument. The long olives, recommended by Dr. G. H. Simmons of Lincoln, Neb., are perfectly free from such danger, being about one inch long and almost parallel on the sides, so that when passed into the urethra they cannot be forced against the opposite wall.

Electricity should not be used if the urethral tract is highly inflamed, unless abolutely necessary; in which case the insulated olive should be employed so the metallic conductor will pass the current only through the stricture.

In treating strictures by electricity inform your patient that several sittings may be necessary, as you cannot force matters. Should a hemorrhage occur, stop the current for a minute or two; if it does not cease then, reverse the polarity for about two minutes, which should control it, and then discontinue the treatment until the next seance, when you reduce the current to about three milliamperes. The sitting should not last over fifteen minutes. If bleeding should occur each time, electricity should be stopped, and Mitchell's urethral bougies, or something to harden the membrane, should be used.

If prostatitis and cystitis are present, there will be occasional spasmodic contractions of the bladder, and the secondary faradic current is indicated, using Dr. Emerson's prostatic electrode in the rectum, attached to the negative pole, the positive being on the abdomen. In such a case, about twenty milliamperes galvanism is used ten minutes, and the faradic current five minutes twice a week. In complicated cases, the stricture should be the last to receive attention, unless the aperture is not sufficient to allow a free flow of urine, when it must be attended to.

In perineal fistula, we may have the distressing pains and discharge, with or without a stricture. An abscess may form and periodically discharge itself through the urethra; in such cases, a stricture, if present, should be forced a little, so as to allow a large electrode to be introduced as soon as possible. I would advise injecting first a little peroxide of hydrogen and using an olive made of zinc, passing the current (ten milliamperes) five minutes from the zinc olive to the back, rectum or scrotum each alternate day. If this is too painful, the current may be increased to twenty milliamperes, and passed from the abdomen to the scrotum, but it is preferable to have the chemical action of the zinc.

In cases of rectal fistula, clean out with peroxide of hydrogen, and then insert a flexible spiral electrode of zinc into the cavity; this will cure in from two to five applications, if there is but a single fistula; if there are several, an operation is preferable.

In regard to electrical dosage, the manipulator must not consider recommendations given by others as fixed, as it must vary with the case, and its complications.

When is a stricture cured? This question has been fully discussed by many prominent men, and I will only state that if the discharge is stopped, and we can pass a No. 30 olive electrode without undue pressure or pain, we may say it is cured, and the patient be discharged.

SELECTED.

DEPARTMENT OF SURGERY.

UNDER THE CHARGE OF JOS. KURTZ, M.D., PROFESSOR OF CLINICAL SURGERY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA, AND CARL KURTZ, M.D.

TONSILLOTOMY, WITH AN ANALAYSIS OF 230 CASES.—(By G. Hunter, M.D., Edinburgh, British Medical Journal:) Tonsillotomy differs from many other operations, inasmuch as it is frequently performed by general practitioners, and is not restricted to the hands of a few surgeons or specialists. Its discussion ought, consequently, to be of interest to the mass of medical practitioners, more so, indeed, than many of the major operations.

To assist at arriving at impartial conclusions the following cases, which have passed through my hands during the last few years, have been specially noted:

Age and Sex.—Under 2 years, 3 males and 2 females; from 2 to 5 years, years, 15 males and 9 females; from 6 to 10 years, 33 males and 31 females; from 11 to 15 years, 18 males and 24 females; from 16 to 20 years, 15 males and 24 females; from 21 to 30 years, 23 males and 14 females; from 31 to 50 years, 8 males and 8 females; over 50 years, 2 males and 1 female; total, 117 males and 113 females.

From these statistics it will be seen that the greatest number of patients were from 6 to 10 years of age; that the males were in excess of the females, unless at the period of puberty, when the proportion of the sexes were reversed, and that the operation is rare under 2 and over 50 years. The small number operated on under 2 years of age is owing mainly to the fact that, unless the indications are very urgent, parents do not care to have infants or very young children operated on.

Indications.—The indications varied somewhat, according to the age of the patient. In children up to 10 years chronic enlargement was most usually present, whilst in those about the period of puberty and onwards acute recurring swelling of moderately-enlarged tonsils was generally met with. The chronic enlargement of infancy and childhood was always associated with derangement of the respiration and of sleep—noisy, snoring and choky respiration and restless disturbed sleep, having invariably been present. The general health was always indifferent or bad (aerial starvation); the chest was poorly developed. These symptoms, associated with chronic enlargement of the tonsils, were aggravated in many instances by certain concomitants, such as purulent rhinitis, post-nasal catarrh and adenoid growths and enlargement of the pharyngeal tonsil—conditions which necessarily required special attention, otherwise the results of tonsillotomy might have proved disappointing. In 157 cases both tonsils were removed, in the remainder (73) only one. The cases of single tonsillotomy were those in which one tonsil only was enlarged, or in which the recurring inflammation habitually commenced in one and the same tonsil. The single tonsil was, I think, more frequently the left than the right. It is a curious fact, without explanation so far, that most lesions of the tonsils, and of the larynx also, evince a greater tendency to commence on the left side than the right.

Anaesthesia.—General anaesthesia (chloroform) was induced in nine cases, with ages varying from 4 to 13 years. In two of these it was admin-

istered to allow of the second tonsil being removed, and in four it was a condition of the operation on the part of relatives. When it is remembered that 135 of the patients were under 15 years of age, it will be admitted that the number requiring general anaesthesia was small. Local applications of 10 per cent. solutions of cocaine were made on most of the other children.

Hemorrhage.—Profuse or troublesome bleeding never followed the operation. In the case of a man, aged 30 years, from whom a small irritable tonsil had been removed, some oozing of blood, which occurred on the second day, was readily stopped by the local application of a solution of pernitrate of iron. I am aware that instances of persistent hemorrhage, after tonsillotomy have been recorded, and a friend of mine has informed me that he once witnessed a case of rapidly fatal hemorrhage in the practice of a brother practitioner. I believe, however, that hemorrhage will not occur if care be taken to leave a cleanly-cut surface, and if the faucial pillar or soft palate be not notched in the operation. It seems, also, that drinking warm fluids soon after the operation favors bleeding. Small children occasionally vomit blood which has been swallowed immediately after the operation. This vomiting may be deferred for hours, and sometimes causes alarm to the relatives, unless they have been forewarned of the possibility of its occurrence.

Results.—In children the local and general results were without exception most beneficial, and the younger the child and the larger the tonsils, so much the more satisfactory was the after-condition of the patient. In two cases only (aged 7 and 10) the tonsils re-enlarged—in one seven months, in the other two years after the operation—and excision had again to be performed. In three adults the tonsillar stumps became inflamed in periods varying from three to fifteen months, and in one instance an acute abscess formed two years after operation. It is right to remind the reader that in children these results in several instances were not attained by removal of the tonsils alone, but, in addition, by curetting or scraping the naso-pharynx and posterior nares and galvano-cauterizing the anterior nares in cases in which obstructions of these regions existed. Such were almost exclusively under 10 years of age, with the marked respiratory and other troubles already referred to, and in no single instance was there failure to give marked relief.

The operation did not appear to be quite so successful in regard to the removal of the deafness, which occasionally accompanies tonsillar enlargement, though in some instances this was remedied, epecially when the operation was supplemented by treatment of the naso-pharynx.

It does not fall within the scope of the present paper to discuss the serious disadvantages from which the children with enlarged tonsils suffer, in regard to their proclivity to diphtheria and allied complaints, and their marked tendency to develop grave types of these diseases. I am satisfied that the operation is neither bloody nor barbarous, and that its results will stand comparison with most of the other surgical procedures of the present day.

VARICOSE ULCERS.—(Therapeutisches Monatsheft:) Kirsch recommends the following treatment of cases of varicose ulcer where absolute rest is impracticable: If the ulcer is deep it is filled with iodoform gauze to the level of the surrounding skin, the edges and borders are dusted with dermatol, and the whole is covered with an absorbent compress. Over this is placed a sufficiently large sponge, with a flat under sur-

face, previously boiled and applied moist, but not too wet. When, however, the ulcer is flat a hydropathic covering is applied to the ulcerated surface direct. In either case the limb is then surrounded from the toes to the knees with a moderately tight non-elastic bandage, the sponge included. In the course of one or two days the sponge will be found to have imbedded itself in the ulcer, and, with continued treatment, the oedema will diminish and disappear, while the edges will be found soft and flattened, and the ulcer in a granulating condition. At this period an ointment can be applied, but the sponge compression should be persevered in, even after the ulcer appears to be healed. When the edges are abnormally hard and rigid the author has found massage very useful, the application being by means of a specially constructed roller. Should the ulcer be too sensitive to allow of immediate compression the author envelops the limbs to as high a limit as possible, commencing above the tender area. The oedema will thus gradually be pressed towards the ulcer and disappear, and at the same time successive bandages will allow of greater approximation to the ulcer until the whole of it can be included in the bandage as described. The author has convinced himself of the efficiency of this treatment in a large number of cases of varicose ulcer, the principle advantage being the ability of the patients to follow their ordinary avocations. His successful cases included ulcers, which for years had resisted all other treatment.

ANTI-DIPHTHERITIC SERUM.—The immunity of individuals against disease is understood to depend upon the destruction by certain agents of the supposed living cause of the disease. These agents may also act by hindering the growth of the living cause or by destroying its infectious properties, by the destruction of the poisonous material produced in the infected organism, or by imparting a higher degree of resisting power against the action of this poisonous material. Belief in the theory of phagocytosis—according to which certain cells of the body tissues possess the property of collecting about the infected region of the body and destroying by absorption the living bacteria supposed to cause the disease has been in great measure replaced by the assumption that the specific action of bacteria is due to tox-albumins or similar poisonous substances. These "toxins," as well as "anti-toxins" or substances that establish immunity to specific diseases in animals, have been shown by Buchner to be probably the direct products of bacterial cells.

The treatment of disease by prepared blood serum is based upon the foregoing ideas with regard to immunity, and is now being very extensively adopted. In April, 1893, Behring and Kossel published the results obtained in the treatment of thirty cases of diphtheria by the injection of so-called antitoxin serum. This serum was obtained from the blood of animals rendered immune to the disease by the prolonged injection of minute but gradually increasing quantities of diphtheritic toxin.* a fluid obtained by the cultivation of diphtheritic bacilli in nutrient broth. The success of the treatment, according to Behring and Kossel, was very remarkable, and more recently other observers—notably Ehrlich, Wassermann and Roux—have confirmed their results.

The first step in the practical application of the process given in outline above is the preparation of the diphtheria toxin from cultivations of the specific bacillus of the disease. Flasks containing nutrient broth are inoculated with the bacilli and maintained for several weeks at a temperature of 37 degrees C. At the expiration of this period of incubation the contents of

* The terms "toxin" and "antitoxin" are here applied generally to the liquids containing the active agents, and not specifically to the latter.

the flasks are filtered through a Chamberland filter, which arrests the bacilli. The clear filtrate thus freed from organisms has a strong alkaline reaction. It is a virulent poison, and speedily causes death when injected into animals in comparatively small quantities; from this property it is called diphtheritic toxin. The toxin is injected into animals in minute but increasing quantities at intervals extending over some months, the initial doses being so small as to cause only transient symptoms, and it is found that animals so treated are finally enabled to withstand the injection of such doses as would prove rapidly fatal to an uninoculated animal of the same weight. When the animal has been thus rendered immune, its milk and blood serum are stated to possess the remarkable property of protecting other animals from inoculation by the disease.

In order to obtain the serum, blood is withdrawn from the body and allowed to stand. It clots in a short time, the clot being composed of filaments of fibrin enclosing the blood corpuscles, and by the contraction of the clot the blood is separated into clot and serum, the latter being a pale clear fluid comprising practically the fluid part of blood, minus corpuscles and fibrin. The serum obtained in this way, from the blood of animals rendered immune, as previously described, constitutes the "antitoxin" used in the treatment of the disease, the name being derived from its antagonistic action to the "toxin" produced by the bacillus. It may be well to state here that nothing is known at present as to the nature of the substances to which the action of the toxin and antitoxin is due. From experiments on animals, the following results were obtained (1) By mixing the antitoxin in certain proportions with the toxin in a test-tube the latter is rendered harmless; (2) by first injecting the antitoxin, followed by the toxin, the same effect is produced; and (3) the toxin may be injected first, followed by the antitoxin; in this case a relatively larger quantity of antitoxin is required, and the interval between the injections must be brief.

The serum used in most of the cases reported was obtained from the horse. The animal is rendered immune by repeated injection over a period of two or three months, at the expiration of which its serum possesses very high antitoxic properties. The animal suffers in health but slightly if at all, and the operation of bleeding may be repeated two or three weeks after being first performed. It is even said to be possible with this animal, rendered immune as previously described, to withdraw about a kilo. of blood at once, and to repeat this from time to time, without any deterioration of the antitoxin obtained or danger to the animal, provided the injections of toxin be continued in the intervals between the blood-letting operations. The dog, goat, and sheep have also been employed, but the blood of the horse furnishes a more abundant and clearer serum than that of the other animals mentioned.

In the clinical application to diphtheria of this antitoxin method of treatment particular stress is laid upon the necessity of injecting the antitoxin as soon as possible after the onset of the disease, the most successful results being obtained within twenty-four hours. After this the protective effects of the antitoxin diminish rapidly, and at an advanced stage of the disease disappear altogether. The effects of the injection in diphtheria are almost immediately manifested in the reduction of temperature and pulse to the normal condition, and complications which usually follow the recovery by ordinary treatment are said to rarely occur in cases cured by the antitoxin treatment.

The dosage of the remedy is at present in rather an unsatisfactory condition, due, of course, to the lack of knowledge concerning the nature of the bodies to which the toxic and antitoxic effects are due. Standardization of the antitoxin therefore depends on the results of physiological experiments. Various systems of stating the strength of the serum have been proposed by Behring, Ehrlich and Roux. These depend essentially upon the determination, in the first place, of the lethal dose for an animal, such as the guinea-pig, of known weight, of a toxin solution which has been prepared in sufficient quantity to form the standard for a large number of cases. The quantity of antitoxin which must be previously injected to protect the animal against this lethal dose is then determined, and the ratio between the weight of antitoxin and the body-weight of the animal furnishes a means of representing in certain units the strength of the solution. Thus, a sample of antitoxin may be said to have a strengh of 50,000 when an animal is protected against its minimum lethal dose of toxin by the subsequent injection of 1-50,000 of its body-weight of the antitoxin in question. The best quantity to use for a case of human diphtheria must ultimately, however, be determined by experience. About one-tenth of the full dose is said to be sufficient for prophylactic measures, and about one-fourth serves to arrest the progress of the disease in its incubation stage.

The numerous results which have been published seem to indicate considerable variation in the strength of the antitoxin supplied by different makers, the quantities injected varying from 0.5 to 20 cubic centimetres. It is to be hoped, therefore, that some means will be found before long of producing the antitoxin of definite and uniform strength. The antitoxin manufactured under Prof. Behring's supervision is supplied in two strengths: No. 1 in tubes containing 10 C.c., sufficing for the treatment of a case of ordinary severity occurring in children; No. 2 is about two and one-half times stronger than No. 1, and the tubes contain 11.5 C.c. The latter is recommended for the treatment of adults or cases of exceptional severity in children. The antitoxin prepared at the Pasteur Institute is injected in doses of 20 C.c., one dose being usually sufficient.

Expectations are entertained by some investigators that other diseases, such as cholera, pneumonia and tuberculosis will also prove amenable to the same system of treatment. Tetanus has already been treated, but the course of the disease is so rapid that in only a few cases has an opportunity been afforded for the application of its specific antitoxin.—(Pharm. Jour.

(Some cases have recently been treated and are still under observation by Drs. Powers, Lasher and Kurtz, which will be reported in the next issue of the Practitioner.—Ed.)

DEPARTMENT OF MEDICINE.

UNDER THE CHARGE OF DRS. F. D. AND ROSE T. BULLARD.

EFFECT OF THE LOCAL APPLICATION OF GUAIACOL IN THE REDUCTION OF THE TEMPERATURE IN TYPHOID FEVER.—Dr. H. G. McCormick (Medical News, Jan. 19, 1895,) had it applied 273 times under his direction. The method was as follows: The right iliac region was thoroughly cleansed with soap and water, and, after being dried, the guaiacol was slowly dropped upon the part and thoroughly rubbed in for from ten to fifteen minutes. The part was then covered with oiled silk. The preparation

used was that of Merck., and it did not fail in a single instance. He concludes: 1. That guaiacol when locally applied is certain to reduce temperature. 2. That with the care that a physician should always use in the administration of drugs, it is absolutely safe. 3. That chills will not occur if the temperature is not reduced below 100 degrees Fahr. 4. That no deleterious effect is produced upon any of the organs by its use. 5. That it is easy to apply, and can be used by any one competent to nurse a typhoid-fever case. 6. There are no depressing effects following an intelligent use of the drug. 7. That by continued use the dose can be gradually lessened. 8. That it is far superior to the cold bath; that it can be used by one person; that no appliances are necessary for its use; that it is much more pleasant for the patient; that it is fully as effective; that patients are not subjected to the danger of moving, and they offer no resistance to its use.

He says he has obtained good results from baths and cold packs, but, after his experience with guaiacol, has no desire to return to either of them. A tabulated report of several cases, giving the temperature, pulse and respiration, as affected by the application, is given. The largest dose used was 25 drops; the smallest, 2 drops; dose was usually 10, 15 or 20 drops; the 20-drop dose appearing most frequently in the table.

A REMEDY FOR WHOOPING-COUGH.—Dr. R. E. Hinman, Atlanta, Ga., (N. Y. Med. Times) reports twenty-eight cases. Thirteen cases in the Crittenden Home in all stages were placed in a closed room, and a 1 per cent. solution of formalin was sprayed from an ordinary hand bulb atomizer for ten minutes three times a day, the spray being thrown above the heads of the patients, saturating the air and inhaled by them. A marked improvement was noted in two days, and in two weeks all were well, and no new cases developed. Fifteen cases were treated afterward at the Inman Orphanage. Here the steam atomizer was used for twenty minutes three times a day in a closed room as before. The result was better. Recent cases were cured within a week, and all in ten days. The attendant, a woman of 50, reported great relief from the spray, of a troublesome bronchitis of years' standing. In five cases of scarlatina its modifying influence was immediate and marked, one comfort to the patients being the absence of flies and mosquitoes from the apartment after its use.

CANNABIS INDICA.—Mackenzie (Semaine Medical, Univ. Med. Magazine) speaks highly of cannabis indica in all forms of cephalalgia. It acted favorably in the severe headaches attending cerebral growths and in chronic uremia. He has found it almost a specific for that continuous form of headache which begins in the morning and lasts all day, while it is rarely severe enough to interfere with occupation, yet it constitutes a source of constant annoyance. In such cases, the author administers morning and evening from one-twelfth to one-half grain in pills. In very obstinate cases, the dose is increased, the larger dose being taken in the evening, until relief is afforded or toxic symptoms become manifest. In various neuralgic affections, gastralgia, enteralgia, the pains of tabes, the drug often proves very useful. In skin diseases, associated with intense itching, particularly senile pruritus, where local applications fail to relieve, it is often used with great benefit. The author has never observed any untoward effects from its use, but advises that it should first be given in small doses, and gradually increased.

MEDULLARY GLYCERIDE.—Dr. Allan McLane Hamilton (N. Y. Med. Journal) reports having administered in eighteen cases medullary glyceride, prepared as advised by Danforth (abstract in Practitioner, January, 1895,)

only the phosphate of sodium and arsenic, which were used by him, were omitted. Good effects were apparent, as a rule, in a few days after the remedy was begun, and lasted after the discontinuance of the treatment. In but one case they were not apparent. In cases in which anemic headaches were the prominent feature the effects of the marrow were marked, and many such improved in a few weeks. Two brominized epileptics were benefitted, and this treatment must commend itself when iron in such cases is apt to produce cerebral congestion and an increase of the fits. It was also given to a patient with pulmonary tuberculosis, who had been exhausted by severe hemorrhages, with remarkable benefit.

OBSTETRICS AND GYNECOLOGY.

UNDER THE CHARGE OF WALTER LINDLEY, M D., ASSOCIATE PROFESSOR OF GYNECOLOGY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA.

A battle is now progressing as to whether the surgeon should say laparotomy, celiotomy or abdominal section. If he would not use either term quite so often the world would probably be as happy.

DR. KEATING'S CATHOLICISM.—In the preface of Lippincott's Clinical Gynecology, just published, is an ante mortem request of the late Dr. Keating that he should not be held responsible for any views contained therein regarding the destruction of a living fetus, which might appear to be contrary to the tenets of the Catholic church.

OVULATION AND MENSTRUATION.—Lawson Tait, quoting from Walter Heape (Buffalo Medical and Surgical Journal) maintains: First, that ovulation does not necessarily occur during each menstrual period. Secondly, that menstruation is not brought about by ovulation. Further, that the ripening of the ovary is independent of the process of menstruation, and that ovulation is neither the cause nor the necessary result of menstruation.

SYMPHYSIOTOMIES.—Dr. George M. Gould reports, editorially, in the Medical News, that Dr. J. A. Williams has performed three symphysiotomies; the first on April 29, 1880, at Denison, Texas; the second on July 15, 1884, in Washington county, Texas; the third in May, 1889, in Washington county, Texas. Dr. Gould says they are the first symphysiotomies in America. The first was on a girl of 13, and the mother and child did well—the child being delivered with forceps. The second was on a primipara of 23. After the operation forceps were applied, and he found it impossible to deliver; then the head was perforated, and forceps successfully applied; mother was up on the twelfth day. The third was on a negress of 18, who had been in convulsions for thirty hours. After the operation the forceps were successfully applied. The child lived, but the mother died in convulsions.

PELVIC MASSAGE—KINESITHERAPY.—Under the above title in the Journal of the American Medical Association Dr. Richard Hogner of Boston has an article in which he makes strong claims for Thure Brandt's method of pelvic masssage. In conclusion Dr. Hogner says "The gynecologic kinesitherapy has its fixed indications and contra-indications. The indications are: Chronic or subacute inflammation in the cellular tissues of the pelvis and their secondary changes; exudation, parametritis and perimetritis and subsequent misplacements (retroflexions, anteversions and anteflexions; diminished mobility of the uterus; misplacement of the ovaries with twisting of the vessels and nerves, adhesions, etc.); oophoritis and paraoophoritis; chronic

metritis (sometimes endometritis), cervical catarrh, descensus and prolapsus uteri, vagino-cysto-rectocele, swelling of the tubes, hematocele, perityphlitis and periproctitis with secondary weakness in the sphincter vesicae and ani. As contra-indications are stated: Malignant tumors, acute pelvic peritonitis, newly established inflammations in general, salpingitis, gonorrheal, purulent, tubercular and septic processes in the uterus and its adnexions, tubal pregnancy, and finally excessive fat in the abdominal wall. A regular pregnancy is not always to be considered as a contra-indication, and Brandt himself, with his marvelous experience, has many times prevented miscarriages by lifting movements, immediately relieving labor pains and hemorrhage; usually after the first or second day he follows the treatment by gentle massage or short tangential strokes from fundus downward to the isthmus. In spite of the fact that gynecologic kinesitherapy is a laborious method, fatiguing to the physician and patient, requiring daily seances for weeks or even months, it is practiced more and more by European physicians and clinical gynecologists, besides, whose time, mind, and strength surely would not be sufficient to devote to unnecessary and fatiguing manipulations. The fact that such men as Schultze, Profanter, Schauta, Duhrssen, von Preuschen, Jentzer, Stapher and others, introduce kinesitherapy into their great operative gynecologic practice, shows best what worth they place on Thure Brandt's method."

SUGAR AS AN OXYTOCIC.—From the New York Medical Times we learn that Prof. Bossi, in the Genoa (Italy) Gynecological and Obstetrical Clinic, reported:

1. In ten out of eleven cases of labor a positive ecbolic result was obtained from an ounce of sugar dissolved in eight ounces of water. Results observed half hour after administration.

2. In some cases one powder of the sugar was enough to induce expulsion of the fetus.

3. If a second powder was given after two hours the effect was more pronounced.

4. In no cases were tetanic contractions observed.

Dr. F. H. Pritchard, in the Medical and Surgical Reporter, confirms the statement of Prof. Bossi, except that in large doses sugar is dangerous, and will produce tetanic contractions and "painful after-pains."

A friend of ours, who is located at the cross roads near El Monte, Los Angeles county, California, reports that he has found the atmosphere of that locality peculiarly efficacious as an oxytocic. He allows his patient to inspire with impunity this El Monte atmosphere during all three stages. His rule is to have these inspirations occur from sixteen to twenty-four times each minute. Our El Monte friend frankly acknowledges, though, that there is this drawback to his treatment, viz., invariably the after-pains are painful.

EYE, EAR, NOSE AND THROAT.

UNDER THE DIRECTION OF W. D. BABCOCK, A.M., M.D., PROFESSOR OF DISEASES OF THE NOSE AND THROAT, COLLEGE OF MEDICINE OF THE UNIVERSITY OF SOUTHERN CALIFORNIA.

ULCERATION OF THE CORNEA.—(Oph. Record, November, 1894:) Dr. Mules, at the Edinburgh Congress, reported treatment of ulcers of the cornea by means of iodoform, boracic acid and gelatin discs. He cocainizes the

cornea and covers the diseased part of the cornea with one of the discs and applies a bandage. He does not interfere for three days, when he usually finds the ulceration cured. Dr. Savage suggests inspection every day and a new disc each inspection. I have found this latter to do well myself.

DIAGNOSIS CONTAGIOUS OPHTHALMIA, PURULENT, CATARRHAL AND GRANULAR.—(Oph. Record, December, 1894:) In the three common varieties, the purulent, catarrhal and the granular, many symptoms are similar, for example, the discharge may be purulent in all three kinds. In the gonorrheal we find the gonococcus of Neisser. The intensity of the symptoms with branny infiltration of the eyelids is also more common in this complaint. Acute granular ophthalmia is to be recognized if the "sago grain" granulations are seen on the palpebral conjunctiva. Their absence, however, is not sufficiently trustworthy to exclude the disease, owing to their existence, in many cases being masked by inflammatory infiltration. It usually subsides into a chronic condition. Acute catarrhal ophthalmia, though frequently severe and oftentimes attended with excessive discharge, conjunctival hemorrhages, and occasioning great discomfort, besides being most contagious, readily subsides under appropriate treatment in about fourteen days.

EYE DISEASES IN RELATION TO DISEASES OF THE AIR PASSAGES.—(Monatsscher of Ohren:) Ziem, upon the basis of his experience of fifteen years, as both rhinologist and ophthalmologist, gives a very interesting general view of those eye diseases that may stand in causal connection to diseases of the nose. In affections of the lachrymal passages, conjunctiva, cornea, uveal tract, optic nerve, lens, orbit, lids and lid muscles, and also in teronitis and in myopia, nasal affections of the most varied nature were found. Among these suppuration of the accessory cavities (antrum, frontal sinus, ethmoidal cells and sphenoidal sinus. B.) played a particularly great part. In numerous cases treated in vain by ophthalmologists, Ziem has effected an improvement and a cure by treating the nose. "In ten years," he says, "no one will be able to carry on the practice of ophthalmology unless he pays careful and constant attention to diseases of the nose.—(Archives of Otology.

IMPROVEMENT OF DEAFNESS BY ACOUSTIC GYMNASTICS by the method of Urbantschitsch of Vienna, (Goldstein, Arch. of Otol., January, 1894.) Prof. U. has obtained surprising results in improving the hearing power of deaf mutes by daily aural gymnastics. A case of complete deafness or deaf-muteism is taken. In a loud voice, close to the patient's ear a vowel is sounded; the patient receives either no impression or indicates a very indefinite sound perception; this sound perception, if present, may be the same for all vowels, thus a-e-i-o-u would all be heard as a or e, as the case may be. The exercise is begun by indicating to the patient the vowels to be used, as a in father, e in eel. In several minutes the patient often arrives at a differentiation—not complete, yet the sounding of a producing a different impression than e. Gradually, as expeditiously as each case indicates, the other vowels are used. The simplest sounds of the vowels are used, Then monosyllables. Consonants are not easily heard, and should receive extra attention. Small words are used, and the idea and word are tried to be associated. Words without meaning should be used to determine if the patient really hears the words used, or is not exercising the power of combination of familiar sounds. As the patient becomes accustomed to the practice, the speaker's lip movements should no longer be observed, in order that the results gained may be those of the aural gymnastics exclusively, without the aid of the eye. The case of a boy is cited, who, at the beginning, could not hear a single vowel when loudly spoken in the ear at closest range; in six months' practice he could hear and repeat accurately whole sentences, with the speaker at a distance of five feet, without the aid of lip reading. The time of each sitting for practice should not be over ten or fifteen minutes, two or three times daily; increase gradually to one-half and one hour, as the case requires.

CORRESPONDENCE.

MEMORANDA RELATING TO THE "DISCOVERY OF ANÆSTHESIA."

BOSTON LETTER.—(From The Critic, New York City, Nov. 17, 1894.) "The fifty-three 'Immortals' of Massachusetts have been selected. In other words, upon the base of the dome in the chamber of the House of Representatives in the new State House will be inscribed the names of fifty-three sons of Massachusetts selected as representing the highest fame of the commonwealth. Some names, according to Senator Hoar, deserving to go in this list will have to be omitted for lack of room, but, as Lieutenant-Governor Wolcott says, the list has been approved by the Governor and his council, and the names have been selected in such a way that each shall either mark an epoch or designate a man who has turned the course of events. Probably the selection, taken altogether, will be regarded as just. In that list stand Prescott, Motley and Parkman. There, too, are Emerson, Hawthorne, Holmes, Bryant, Longfellow, Lowell and Whittier, while Carver, Bradford, Endicott, Winthrop, Vane, Pickering, Knox, Lincoln, John Adams, John Quincy Adams and Quincy are among the early patriots thus honored. Howe, the husband of Julia Ward Howe, the great worker for the blind, and tutor of Laura Bridgman; Morton, who discovered the safe use of ether; Copley, Hunt, Edwards, Channing, Brooks and Morse are also there, together with the great statesmen, Webster, Sumner, Wilson, Andrew, Choate, Everett, Phillips and Garrison. Among the latter names are those of Devens, Bowditch, Pierce and Agassiz, while Bell, the inventor of the telephone, is the only man still living who is included in the list. These names will indicate the general drift of the selection.

And in this connection it is believed that the two accompanying letters from Dr. Oliver Wendell Holmes, one of them of recent date, and both published in the New York Medical Record of December 22, 1894, in the following communication will be of interest.

"ORIGIN OF THE TERM ANAESTHETIC."

To the Editor of the Medical Record.

Sir: I notice, in your issue of December 8, an account of a conversation upon this point, between Mr. Edgar Willett and Dr. Oliver Wendell Holmes, when the latter was in England, in 1886.

It is quite possible that Dr. Holmes had forgottten that he had, in 1846, written to Dr. Morton a letter elaborately analyzing the varied appropriateness of several terms, and I take pleasure in sending to you from among my father's correspondence a copy of Dr. Holmes's original letter, exactly corroborative of the conversation above referred to. Dr. Holmes's letter reads as follows

"Boston, November 21, 1846.

"My Dear Sir: Everybody wants to have a hand in a great discovery. All I will do is to give you a hint or two, as to names, or the name, to be applied to the state produced and the agent.

"The state should, I think, be called 'anaesthesia.' This signifies insensibility, more particularly (as used by Linnaeus and Cullen) to objects of touch. (See 'Good-Nosology,' p. 259.) The adjective will be 'anaesthetic.'

"Thus we might say the state of anaesthesia, or the anaesthetic state. The means employed would be properly called the anti-aesthetic agent. Perhaps it might be allowable to say anaesthetic agent, but this admits of question.

"The words antieuric, aneuric, neuro leptic, neurolepsia, neuro etasis, etc., seem too anatomical; whereas the change is a physiological one. I throw them out for consideration.

"I would have a name pretty soon, and consult some accomplished scholar, such as President Everett or Dr. Bigelow, Sr., before fixing upon the terms, which will be repeated by the tongues of every civilized race of mankind.

"You could mention these words which I suggest for their consideration; but there may be others more appropriate and agreeable.

"Yours respectfully, "O. W. HOLMES."

"Dr. Morton."

While upon this subject it may interest your readers to read another letter of Dr. Holmes's, written forty-seven years later on—in fact, only a few months before his death—wherein no failure of his vigor or felicity of expression is wanting. This letter, now in the possession of the writer, has been published only in part, in the August number of the Century Magazine of the present year, in an article entitled "Dr. Morton's Discovery of Anaesthesia." It reads as follows

Boston, April 2, 1893.

"My Dear Sir: Few persons have or had better reason than myself to assert the claim of Dr. Morton to the introduction of artificial anaesthesia into surgical practice. The discovery was formally introduced to the scientific world in a paper read before the American Academy of Arts and Sciences by Dr. Henry J. Bigelow, one of the first, if not the first, of American surgeons.

"On the evening before the reading of the paper containing the announcement of the discovery, Dr. Bigelow called at my office to recite this paper to me. He prefaced it with a few words which could never be forgotten.

"He told me that a great discovery had been made, and its genuineness demonstrated at the Massachusetts General Hospital, of which he was one of the surgeons. This was the production of insensibility to pain during surgical operations, by the inhalation of a certain vapor (the same afterward shown to be that of sulphuric ether.) In a very short time, he said, this discovery will be all over Europe. He had taken a great interest in the alleged discovery, had been present at the first capital operation performed under its influence, and was from the first the adviser and supporter of Dr. W. T. G. Morton, who had induced the surgeons of the hospital to make trial of the means by which he proposed to work this new miracle. The discovery went all over the world like a conflagration.

"The only question was whether Morton got advice from Dr. Charles T. Jackson, the chemist, which entitled that gentleman to a share, greater or less, in the merit of the discovery.

"Later it was questioned whether he did not owe his first hint to Dr. Horace Wells, of Hartford, which need not be disputed. Both these gentlemen deserve 'honorable mention' in connection with the discovery, but I have never a moment hesitated in awarding the essential credit of the great achievement to Dr. Morton.

This priceless gift to humanity went forth from the operating theater of the Massachusetts General Hospital and the man to whom the world owes it is Dr. William Thomas Green Morton.

"Experiments have been made with other substances besides sulphuric ether, for the production of anaesthesia. Among them, by far the most important, is chloroform, the use of which was introduced by Sir James Y.

Simpson. For this and for the employment of anaesthetics in midwifery he should have all due credit, but his attempt to appropriate the glory of making the great and immortal discovery, as revealed in his contribution to the eighth edition of the 'Encyclopedia Britannica,' is unworthy of a man of his highly respectable position. In the ninth edition of the same work his article 'Chloroform' is omitted, and a fair enough account of the discovery is given under the title 'Anaesthesia.'

"Yours very truly, "O. W. HOLMES."

"P. S.—You had better apply to Dr. Richard M. Hodges for his recent paper on the subject if you have not seen it already.

"I am, yours very truly, WILLIAM J. MORTON, M.D."

"New York City, December 15, 1894."

William Thomas Green Morton, M.D., medical student, dentist and physician, and the recent recipient of Massachuetts' honor, was born in Charlton, Mass., August 9, 1819, and died, aged 48, in New York City, July 15, 1868.*

In 1840, at the age of 21, he was a student in the "Baltimore College of Dental Surgery," a chartered organization connected with the Washington University of Medicine of Baltimore.

Subsequently he engaged in the practice of dentistry in Boston, in the meantime assiduously pursuing his studies to receive a medical degree.

March 20, 1844, he entered his name as a student of medicine with Dr. Charles T. Jackson of Boston.

In November, 1844, he entered the Harvard Medical School in Boston in regular course as a matriculate and attended all the lectures.

In 1852 he received the honorary degree of Doctor of Medicine from his original alma mater, the Washington University of Medicine (afterward merged into the College of Physicians and Surgeons), of Baltimore, Md.

On September 30, 1846, at his office in Boston, he administered sulphuric ether to Eben Frost and extracted a tooth without pain to the patient.

Securing permission from Dr. John C. Warren, senior sugeon of the Massachusetts General Hospital, on October 16, 1846, he administered ether to a patient at the hospital, and Dr. Warren performed a severe surgical operation, the patient remaining unconscious during the operation.

He was now 27 years of age, and still a medical student in the Harvard Medical School. The discovery, now announced, brought with it overwhelming labors, and he was compelled to discontinue his studies from that moment onward.

From this crucial demonstration in October, 1846, dates the immediate and universal adoption of the practice of anaesthesia throughout the civilized world. The event marked the advent of a new epoch in the world's history, namely, the epoch of practical painless surgery.

Over Dr. Morton's grave in Mount Auburn Cemetery, near Boston, a monument has been "erected by citizens of Boston," including names the most re-

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*See the American Cyclopaedia: New York, D. Appleton & Co., 1875. Article, "Morton, W. T. G.," p. 855. See Encyclopaedia Britannica, Ninth Edition, Aritcle, "Anaesthesia." See the Century Illustrated Monthly Magazine, New York City, August, 1894.

spected and most honored among them, bearing the following inscription, written by the late Dr. Jacob Bigelow of Boston:

"WILLIAM T. G. MORTON,
Inventor and Revealer of Anaesthetic Inhalation.
By Whom Pain in Surgery was Averted and
Annulled.
Before Whom, in All Time, Surgery was Agony.
Since Whom Science has Control of Pain."

U. S. Department of Agriculture, Weather Bureau,
Washington, D. C., January 2, 1895.

The interest manifested by every class of people in the subject of climate and its influence on health and disease has determined the Honorable Secretary of Agriculture, through the medium of the Weather Bureau, to undertake the systematic investigation of the subject.

It is hoped to make the proposed investigation of interest and value to all, but especially to the medical and sanitary professions, and to the large number of persons who seek, by visitation of health resorts and change of climate, either to restore health or prolong lives incurably affected or to ward off threatened disease.

The study of the climates of the country in connection with the indigenous diseases should be of material service to every community, in showing to what degree local climatic peculiarities may favor or combat the development of the different diseases, and by suggesting, in many instances, supplementary sanitary precautions; also by indicating to what parts of the country invalids and health-seekers may be sent to find climatic surroundings best adapted to the alleviation or cure of their particular cases.

The hearty co-operation of the various boards of health, public sanitary authorities, sanitary associations and societies, and of physicians who may feel an interest in the work, is asked to achieve and perfect the aims of this investigation.

No compensation can be offered for this co-operation other than to send, free of cost, the publications of the bureau bearing upon climatology and its relation to health and disease to all those who assist in the work.

Co-operation will consist in sending to this office reports of vital statistics from the various localities. That these reports may be of value, it is evident to all that they should be accurate and complete, and be rendered promptly and regularly. Blank forms of reports have been prepared so as to occasion as little trouble and labor as possible on the part of the reporter, and will be furnished by the bureau on application.

At the very beginning of the investigation it is not possible to outline precisely the channels through which the results obtained will be made public, but it is hoped to publish soon a periodical devoted to climatology and its relations to health and disease. The publication will probably resemble in size and general appearance the present Monthly Weather Review, the subject matter being, of course, different.

More detailed information will be furnished on application.

MARK W. HARRINGTON. Chief of Bureau.

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107 North Spring street, Los Angeles.

Communications are invited from physicians everywhere; especially from physicians of the Pacific Coast, and more especially from physicians of Southern California and Arizona.

EDITORIAL.

BEHRING'S ANTITOXIN.

As a specific for diphtheria is still *sub judice*. Data upon which to base a consensus are as yet insufficient. The inadequate supply of the remedy and the uncertainty of its reliability when carried long distances, has limited experimentation on this continent.

Numerous laboratories and depots of supply, private, municipal and state, have been established, or are in process of establishment, so that soon we shall be able everywhere to obtain the freshly prepared serum.

The California State Board of Health has memorialized the Legislature, asking an appropriation of $6000 for this purpose, the work to be done at the State University at Berkeley, under the direction of Prof. Rising, the State Analyst. Whatever the demands for retrenchment, it will be economy to make this small appropriation, and we trust it may be done.

As to the present status of the remedy, in many of the reports of English and American cases, the new treatment has simply supplemented old-line measures. It is noticeable that as the number of recoveries under the combined treatment increases, the antitoxin is more and more relied on; so ere long we shall have the privilege of choosing between the new remedy and

the *vis medicatrix naturae* as the deserving recipient of our confidence and praise.

With characteristic thoroughness the Germans, through the *Deutsche Medicinische Wochenschrift*, are organizing a collective investigation of the new treatment throughout the empire. A schedule of questions is being issued to every medical practitioner, whether in hospital or in private practice. Meanwhile, in England, Dr. Klein of St. Bartholomew's Hospital and College is distributing samples of serum prepared according to Behring's formula, and every week the pages of the British Medical Journal present the results. Those who have given the serum most careful trial claim for it greater efficiency than for any other remedy. They assert that it has a most powerful influence over the disease, especially in the early stages. When given not later than the third day it seems to check the disease completely. When deferred until the supervention of cachexia, it exerts no control over the rapid wasting, and is believed to increase the tendency to heart failure. In all cases it appears to hasten the separation of membrane already formed, and to prevent the formation of new. It reduces glandular enlargement, relieves throat pain, improves the appetite, and produces sleep. Such claims, even from unknown reporters, are sufficient to inspire hope in the presence of the hitherto well-nigh unrestrained fatality of this disease.

Twenty years ago the sum of $5000 was placed in the hands of the *Academie de Medicine* of France as a prize to be given to the discoverer of a cure for diphtheria. It has never been awarded. Sad comment on the helplessness of modern medicine! Should the academy vote it to Behring, despite the well-known professional jealousy that lingers as a vestige of the Franco-Prussian war, we need hardly wait for the *Wochenschrift's* report, but may consider the matter settled.

Should the claims of the new remedy be fully sustained, however, it will yet fall short of vaccination. Having obtained a cure we shall still lack a preventive. But, for the present, Hail, Behring!

CHREMATOPHOBIA.

We venture to coin a word to indicate the *fear of money*, a disease by no means so prevalent as it should be. Paul warned Timothy against the love of it, declaring it to be "a root"—that is, the tap-root—"of all evils." Some years ago our national surplus seemed to excite a great deal of fear, in some directions, but both cause and result have since entirely disappeared. As a rule physicians are not afflicted with sufficient surplus to arouse alarm, nor indeed with any surplus at all. It is not the bulk of the thing that need awaken apprehension, but its nastiness. Both Peter and Paul describe it forcefully as "filthy lucre." That lucre in those days meant gain, we are aware, and so it does now; but it embraces the means to the end as well. Quite recently Prof. Demosthenes—not he of Athens and the ancient Philippics, but he of Bucharest and of the modern—has raised a note of warning to medical men to use strict antiseptic precautions in handling their fees. He pictures a practitioner in attendance upon an infectious case, receiving money which has been under the patient's pillow or otherwise in his contact, going thence to the bedside of another, and thus conveying the poison to him. That such a possibility exists, and that it might be elaborated *in extenso* there can be no question, for both coin and paper money frequently swarm with microbes. We venture to lift our voice in support of the eloquent Roumanian, urging upon physicians greater care in the handling of money.

The subject of specific disease lays his fee on the desk. If a note, it is placed in the wallet with papers of value; if coin, dropped into a pocket which is never washed, to keep close company with a knife that pares the nails, and sometimes slips. Arriving at the first depot of expenditure, it may be the butcher or the baker, it defiles the hands with which the food for the purchaser and his family is handled. Or it may be that the payment, however small, is made by a trachomatous case. While ablution of the hands may be scrupulously performed, what about the money? The physician himself or his next patient may prove the victim of carelessness.

Despite the asserted belief of some modern authorities to the contrary, cases of leprosy in Caucasians have occurred which could be traced to no other source than leprous coin.

There can be no question that money is a common means of distributing tubercular infection. Doubtless many a bank clerk, who attributes an acquired tuberculosis to lack of exercise and sunshine, has met his fate in the bacilli-laden lucre committed to his care. One of the most distressingly disgusting sights of frequent occurrence on street-cars is the woman with her fare in her mouth. Men would doubtless be as foolish were it not for their innumerable filthy pockets. For years we have disinfected all suspicious coin coming into our hands, but have been unable to deal satisfactorily with bank notes. Demosthenes proposes for these a 5 per cent. carbolic acid bath—an apparently inpracticable process. Fortunately, on this Coast the circulating medium is chiefly coin. Possibly, in the new future a laundry may be a necessary attachment to swell offices, the receipts of whose occupants shall come under the supervision of the Department of Internal Revenue. Meanwhile we refer the unsolved portion of the filthy problem to the unfortunates whose only money is paper.

THUNDER IN ARIZONA.

The recent report to the Arizona Legislature of Dr. George E. Goodfellow, who during the cholera scare of 1893 was Territorial Health Officer pro tem., is as radical in the wrong direction as anything that has for a long time startled the epidemiological ear. We have been unable to secure a copy of the full report, but form our conclusions from a synopsis and liberal excerps, taken from the Phoenix Gazette, and republished in the Los Angeles Times. He says: "In spite of fifty years of research and sanitation, not only has the cause of a single one of the zymotic diseases not been discovered, but not a single case can be shown to have been prevented." How an intelligent man with opportunity to familiarize himself with authenticated facts could compromise his reputation for impartial judgment by a statement so inimical to the truth we are at a loss to comprehend. One might readily believe his animadversions upon the Hamburg epidemic of 1893 were based upon sensational newspaper reports. In his asserted quotations from reputable bacteriologists he has evidently isolated statements which, out of connection, fail to exhibit the whole truth. As a summing up he says: "All this may seem a plea for dirt, an apotheosis of filth, but it is not. I hold that cleanliness, instead of being next to godliness, is a little ahead of that unknown quality. But I also hold stoutly to the belief that such cleanliness is not to be attained by State interference, with individual liberty and the taxation of many to accomplish no more than the breeding of a pest of disease and office-holders, whose only object is to filch from the public treasury and to provide offices for political frauds and incapables."

We are indeed sorry that our neighboring Territory should be in such peril from her political incompetents. Until now we had believed that she had at least one capable sanitarian who, knowing his duty, would not fail to see it done. The Territory, on Dr. Goodfellow's representation, needs an infusion of honest citizens as much as it possibly can of wholesome filth.

We have not the pleasure of the doctor's acquaintance, but we suspect, on more mature reflection, he will regret having put himself on record so palpably on the wrong side. The dispatches from Constantinople, which lie before us as we write, report sixty-one cases of cholera and twenty-nine deaths in the week between February 5th and 12th, and all that despite Oriental filth.

At the same time Ernest Hart, editor of the British Medical Journal, is in India, endeavoring to bring about a more efficient governmental sanitary supervision, by which the most experienced sanitarians believe it possible to restrict, control and eventually eradicate the poison at its place of origin. But great minds will differ, and one is to be honored for the courage of his convictions, if he have not lost the capacity for acquiring a knowledge of the truth.

THE INCOME TAX.

It is an old saying that nothing is certain but death and taxes; but there has been foisted on us a rather dubious form of taxation—an income tax. We speak of it as dubious because so many people are doubtful as to what should be reckoned as income. The law, however, requires every one who, from whatever source, receives $3500 per year, to make a detailed statement to the collector—the collector for this district being O. M. Welburn, San Francisco. A failure to do so, from whatever cause, before the first Monday in March, will call for a penalty of 50 per cent.

The physician must return the following: Cash received for services rendered in 1894, *all good book accounts*, interest, dividends, etc., from any source. He can make the following deductions: Interest paid out, taxes, necessary expenses actually incurred in carrying on business. If the balance is over $4000, that surplus will be subject to taxation. The entire income of all the members of the family must be reported. If a man and wife are both earning money, the income of both should be returned, as $4000 is all any one family can have. If any one is smart enough to earn a larger amount, his industry and perseverance are to be punished by law.

There are probably several dozen physicians in this city who fall in this category. It will be their duty to report at once their gross income, with proper reductions. We speak of this because we think there are many who may otherwise overlook it, for the law is very exacting, and imposes heavy penalties for any dereliction. The law may be inquisitorial, un-American and uncalled-for, and may bear particularly hard on physicians; but it is the law of the land, enacted by the present moribund Congress, and it will set a large number of the practicing physicians of this section to figuring.

EDITORIAL NOTES.

Dr. Knopf calls attention to the fact that in his article in the November issue, page 440, fourteenth line, l'hopital Trousseau is incorrectly spelled. We beg the doctor's pardon, but plead that we are fallible.

"The History of Medicine," by Roswell Park, M.D., Professor of Surgery, University of Buffalo, embraces not alone the history of medicine, its evolution and progress from the earliest times down to the present, but likewise deals with mythological factors, and the political, religious and philosophical issues of the science. Delivered in Alumni Hall, Medical Department of the University of Buffalo, during October, November and December of 1894, these lectures will now appear, exclusively, in the Medical Age, beginning with the issue of January 10, 1895.

Pacific Coast Association of Examiners for Life and Accident Insurance Companies.—The meeting held in Portland, Or., January 30, 1895, to complete the organization of this association, was marked by much enthusiasm upon the part of those present. The new society began its work with sixty-six charter fellows. Dr. R. Kelly was elected as president, and Dr. Henry W. Coe secretary. A vice-president was chosen for each Pacific Coast State, the vice-president from California being Dr. F. D. Bullard of Los Angeles. The fellowship fee was fixed at $2. There are no dues. The next meeting of the association will be held at Seattle, in May of this year at the time of the meeting of the State Medical Society of Washingon. Applications for membership should be made to Dr. Coe, at Portland. Or.

PAMPHLETS RECEIVED.

CAN PHYSICIANS HONORABLY ACCEPT COMMISSIONS FROM ORTHOPEDIC INSTRUMENT MAKERS. By H. Augustus Wilson, A.M., M.D., Professor of General and Orthopedic Surgery, Philadelphia Polyclinic, etc. Reprinted from the Philadelphia Polyclinic, Philadelphia, 1894.

HYPERTROPHY OF THE PHARYNGEAL OR LUSCHKA'S TONSIL. By E. Fletcher Ingals, A.M., M.D.; Chicago, Ill. Reprinted from the Journal of the American Medical Association Journal, September, 1894.

CAUTERIZATION OF THE NARES AND ACCIDENTS THAT MAY FOLLOW. By E. Fletcher Ingals, A.M., M.D Read before the Annual Meeting of Illinois State Medical Association, Decatur, May 1894.

MODERN HOMEOPATHY. ITS ABSURDITIES AND INCONSISTENCIES. By William W. Browning, A.B., LL.B., M.D., Lecturer and Demonstrator of Anatomy, Long Island College Hospital, etc.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF CALIFORNIA. Thirty-second Annual Announcement, 1895.

AN ADDRESS ON APPENDICITIS. By J. William White, Professor of Clinical Surgery; University of Pennsylvania. Reprinted from the Therapeutic Gazette, June 15, 1894.

FIVE YEARS' WORK IN DISEASES OF THE RECTUM AT THE NEW YORK POST-GRADUATE HOSPITAL. By Charles B. Kelsey, M.D. Reprinted from the New York Medical Journal, Dec. 8, 1895.

NEW INSTRUMENTS. By Seth Scott Bishop, Professor of Otology in the Post-Graduate Medical School and Hospital, Chicago, Ill. Reprinted from the Journal of the American Medical Association, Sept. 29, 1894.

OPHTHALMIC MEMORANDA. By William C. Bane, M.D. late Lecturer on Diseases of the Eye and Ear in the Medical Department of the Western University of Pennsylvania. Reprint from American Medico-Surgical Bulletin, Sept. 15 1894.

ASTIGMATISM AS A FACTOR IN THE CAUSATION OF MYOPIA. By Leartus Connor, A.M., M.D. Reprinted from the American Lancet, January, 1895.

REST IN BED AS A RESOURCE IN THE TREATMENT OF CHRONIC NON-SUPURATIVE CATARRH OF THE MIDDLE EAR. By A. Britton Deynard, M.D., Instructor in Diseases of the Eye and Ear, etc. From the Post-Graduate.

REMINISCENCES OF DR. J. MARION SIMS, IN PARIS. By Edmund Souchon, M.D., Professor of Anatomy and Clinical Surgery, Tulane University, New Orleans, La. Reprinted from the Medical Record, Dec. 8, 1894.

THE PHYSIOLOGICAL ROLE OF ANTITOXINE INOCULATIONS. Editorial in the American Therapist, September, 1894.

DIET FOR HEALTH. By John Aulde, M.D. Reprint from the American Therapist, October, 1894.

CASTRATION FOR HYPERTROPHIED PROSTATE. By B. Merrill Ricketts, Ph. C. M.D., Cincinnati, Ohio. Reprinted from the Times and Register.

THE FUNCTIONS AND THE FORM OF THE OBSTETRIC FORCEPS. By Wallace A. Briggs, M.D., Sacramento, Cal. Reprinted from the Journal of the American Medical Association, August 18, 1894.

ADDRESS TO THE "HONOR MEN" OF THE BARNES MEDICAL COLLEGE, St. Louis, Mo., etc. By James T. Jelks, M.D., Hot Springs, Ark., Professor Gynecology and Syphilology in Barnes Medical College, St. Louis, Mo., etc. From the Hot Springs Medical Journal, April, 1894.

BOOK REVIEWS.

BLOOD SERUM THERAPY AND ANTITOXINS. By GEORGE E. KRIGER, M.D., Surgeon to the Chicago Hospital, etc. With illustrations. Chicago: E. H. Colegrove & Co. 1895. Price $1.00.

As blood serum therapy is now the particular fashion of the day, this book will be in great demand. It treats first of the subject in general, then of toxines and toxalbumins, and finally of the practical application of these new ideas to tetanus and diphtheria. This little work contains 69 pages, but it presents the arguments supporting this new system of therapeutics in a concise, succinct, and convincing form. That we are about to see the dawn of the science of therapeutics we fondly hope—how near that day is, is prophesied in these pages. The physician who wishes to obtain the new opinions in a nut shell will find them in this book.

ESSENTIALS OF DISEASES OF THE SKIN, INCLUDING THE SYPHILODERMATA, ARRANGED IN THE FORM OF QUESTIONS AND ANSWERS. Prepared Especially for Students of Medicine. By HENRY W. STELWAGON, M.D., Ph.D., Chemical Professor of Dermatology in the Jefferson Medical College, &c. Third Edition. Revised and enlarged, with seventy-one letter press cuts and fifteen half-tone illustrations. Philadelphia. W. B. Saunders, 925 Walnut St. 1894. Price $1.00.

In 1890 we reviewed the first edition of this compend and expressed the opinion it was as terse a compilation of skin diseases as was compatible with an intelligent presentation of the subject, that it was selective and modern in its handling of remedies. The chief improvement of this over former editions is the addition of fifteen half-tone illustrations and an appendix references to the various atlases in common use—only those plates giving clear and satisfactory representations being considered. Other changes are made to bring up the medication to the advances of the past four years. The following is a brief plan of the book. Anatomy of the Skin, Symptomatology, Classification, Disorders of the Glands, Inflammations, Hemorrhages, Hypertrophies, Atrophies, New Growths, Neurosis, Parasitic Affections, Appendix of Atlas References and Statistics as to relative frequency of the various skin diseases. We have used the former edition in actual practice and found it a handy book, and think the student or even general practitioner will find it calculated to meet their wants.

THE SANITARIAN, TWENTY-THIRD YEAR, 1873 TO 1895.—The Sanitarian will continue in the future, as it has been hitherto, devoted to the promotion of the art and science of sanitation, mentally and physically, in all their relations; by the investigation, presentation and discussion of all subjects in this large domain, as related to personal and household hygiene, domicile, soil and climate, food and drink, mental and physical culture, habit and exercise, occupation, vital statistics, sanitary organizations and laws—in short, everything promotive of or in conflict with health, with the purpose of rendering sanitation a popular theme of study and universally practical. The Sanitarian will continue in its present form, ninety-six pages text, monthly; two volumes yearly. The volumes begin January and July. Subscriptions at any time. Terms, $4.00 a year, in advance; 35 cents a number; sample copies, 20 cents—ten 2-cent postage stamps. All correspondence and exchanges with the Sanitarian, and all publications for review should be addressed to the editor, Dr. A. N. Bell, Brooklyn, N. Y.

California's only magazine, the Overland Monthly, for February, is fully up to the high standard that Mr. Wildman a year ago set for it. Its cover is an artistic triumph and its contents a literary feast. In his charming department, "As Talked in the Sanctum," the editor discusses with his colleagues the Napoleonic craze. The second installment of "Famous Californians of Other Days, treats of Gov. Stoneman, Gen. Ord, Bishop Gip, Col. Stevenson, Col. Inge, Baille Peyton and Senator McDougall.

The second part of "The Evolution of Ship-building in California," continues the interesting narrative of the old pioneers who built up a commerce on this Coast. The most charming illustrated article in the number is by Mrs Thompson on "The Wild Flowers of Hawaii." E. W. Wooster tells of a paradise for sportsmen in the Salmon River Country, in a happily-written descriptive article—"Pine Boughs." The discussion of the "Income Tax," by Charles J. Swift, and "Oregonian Characteristics," by Alfred Holman, are both subjects of more than passing value, while Prof. Culin's account of "Fortune-telling Among the Chinese in America," is a valuable contribution to the literature on that subject. Among the stories of which the Overland is always so strong, is the third number of the "True Tales of the Old East," by Chauncey L. Canfield; a Mormon story by Alvah Milton Kerr, "Dead Sea Fruit," and a clever bank robbery tale by Wade Brooks. The poetry is by Edwin Wildman, L. Worthington Green, Charles A. Gunnison and Clara Blake Morgan.

The January (1895) number of the Alienist and Neurologist contains: "Evidences of Sanity in Criminal Cases," by James G. Kiernan, M.D., Chicago; "Observations on the Histological Development of the Cerebellar Cortex," by Dr. Aurelio Lui, Brescia Provincial Asylum; "Physiological and Therapeutic Researches on the Pseudohyoscyamine of Merck.," by Dr. Giuseppe Guicciardi; "Bilateral Paralysis of the Facial Nerve," by Dr. Monjoushko, Russia; "The Evolution of Scientific Neurology and Its Utility in Medical Practice," by John Punton, M.D., Kansas City, Mo.; "Study on Criminal Anthropology," by Dr. Abundio Aceves, Guadalajara, Mexico; "Psychical and Physical Sanitation, the Influence of the Press Thereon," by C. H. Hughes, M.D., St. Louis; editorials, selections, hospital notes, reviews, etc.

REGISTERED MORTALITY OF LOS ANGELES.

WITH SEX AND NATIVITY OF DECEDENTS.

Estimated Population, 75,000. *January, 1895.*

CAUSE OF DEATH	Total Deaths	Annual rate per 1000	SEX		NATIVITY				RACE		
			Male	Female	Los Angeles	Pacific Coast	Atlantic States	Foreign Born	Caucasian	African	Mongol
Deaths from all causes	104	16.63	63	41	20	7	47	30	102	1	1
Deaths under 5 years	17										
i. Specific infectious diseases	17		8	9	9	2	5	1	17		
ii. Diseases of digestive system	8		6	2	3	1	3	1	8		
iii. Diseases of respiratory system	25		19	6	3	3	11	8	24		1
iv. Diseases of nervous system	13		6	7	4		6	3	12	1	
v. Diseases of circulatory system, blood and ductless glands	13		9	4			6	7	13		
vi. Diseases of genito-urinary org'ns	8		3	5	1		4	3	8		
vii. Constitutional diseases	3		2	1			3		3		
viii. Intoxication, violence, accidents	6		4	2		1	4	1	6		
ix. Miscellaneous diseases	11		6	5			5	6	11		
i. Septicæmia	1			1			1		1		
Pyæmia											
Diphtheria	8		5	3	7		1		8		
Erysipelas											
Typhus fever											
Typhoid fever	2		1	1		2			2		
Malarial fever	1			1			1		1		
Scarlet fever											
Measles											
Cerebro-spinal meningitis											
Smallpox											
Tuberculosis	3			3			2	1	3		
Influenza											
Dysentery	1		1		1				1		
Syphilis	1		1		1				1		
Tetanus											
ii. Diseases of the œsophagus											
Gastritis	1		1		1				1		
Gastro-enteritis	1			1	1				1		
Cholera infantum											
Enteritis	1		1		1				1		
Appendicitis											
Intestinal obstruction	1			1		1			1		
Diseases of liver	3		3				2	1	3		
Peritonitis	1		1				1		1		
iii. Membranous croup											
Bronchitis	2			2	1		1		1		
Pneumonitis	5		4	1	1		4		5		
Pleuritis											
Phthisis	18		15	3	1	3	6	8	17		1
iv. Diseases of brain	12		6	6	4		6	2	11	1	
Diseases of spinal cord											
Eclampsia											
Epilepsy											
v. Diseases of heart	13		9	4			6	7	13		
Degeneration of arteries											
Aneurism											
Anaemia											
vi. Uraemia											
Acute Bright's disease	3		2	1	1		1	1	3		
Chronic Bright's disease	5		1	4			3	2	5		
Diseases of genital-organs											
vii. Rheumatism											
Gout											
Inanition											
Senility and Asthenia	3		2	1			3		3		
viii. Alcoholism	1			1			1		1		
Opium habit	1		1				1		1		
Suicide	1		1				1		1		
Violence and accidents	3		2	1		1	1	1	3		
ix. Tumors—malignant	10		5	5			5	5	10		
Tumors—non-malignant											
Other diseases	1		1					1	1		

F. W. STEDDOM, M D., Health Officer.

MONTHLY METEOROLOGICAL SUMMARY.

U. S. WEATHER BUREAU, LOS ANGELES STATION.

Los Angeles, California. *Month of January, 1895*

Date	TEMPERATURE Max.	Min.	Mean	Precipitation in inches and hundredths
1	64	42	53	0
2	63	43	53	0
3	64	42	53	0
4	56	42	49	T
5	56	48	52	1.13
6	55	46	50	0
7	61	41	51	0
8	64	49	56	0
9	71	48	60	0
10	77	52	64	0
11	77	54	66	0
12	70	50	60	0
13	63	47	55	0
14	54	48	51	.70
15	56	50	53	1.20
16	58	50	54	.17
17	57	42	50	.41
18	53	44	48	1.07
19	49	44	46	.66
20	55	41	48	.33
21	58	40	49	0
22	61	42	52	0
23	53	43	48	.14
24	61	39	50	0
25	60	39	50	0
26	63	37	50	0
27	57	38	48	0
28	62	39	50	.03
29	63	37	50	0
30	64	37	50	0
31	63	37	50	0

SUMMARY

MONTHLY RANGE OF BAROMETER:

Mean Barometer, 30.02.
Highest barometer, 30.31, date 8.
Lowest barometer, 29.64, date 16.
Mean Temperature, 52°.
Highest temperature 77°, date 10.
Lowest temperature 37°, date 26.
Greatest daily range of temperature 27°, date 30.
Least daily range of temperature 5°, date 19.

MEAN TEMPERATURE FOR THIS MONTH IN

1877		1883	53°	1889		52°
1878	55°	1884	54°	1890		49°
1879	53°	1885	55°	1891		56°
1880	54°	1886	55°	1892		57°
1881	53°	1887	55°	1893		57°
1882	50°	1888	50°	1894		51°
				1895		52°

Mean temperature for this month for 16 years, 53°
Total deficiency in temp. during the month, 33°
Total deficiency in temp. since Jan. 1. 33°
Prevailing direction of wind, East.
Total movement of wind, 2863 miles.
Maximum velocity of wind, direction, and date, 18m, S.W., 16th.
Total Precipitation, 5.84 inches.
Number of days on which .01 inch or more of precipitation fell, 10.

TOTAL PRECIPITATION FOR THIS MONTH IN

1878	.33	1884	3.15	1890	7.8
1879	3.59	1885	1.05	1891	.25
1880	1.33	1886	7.78	1892	.88
1881	1.43	1887	.20	1893	6.29
1882	1.01	1888	6.04	1894	.94
1883	1.62	1889	.25	1895	5.84

Average precip'n for this month for 16 years, 2.97.
Total excess in precip'n during month 3.87.
Total precip'n from Sept. 1,'94, to date, 11.2° inch.
Averge precip'n from Sept.1,'94, to date, .. inch.
Total deficiency from Sept.1,'94, to date, 1.34 in.
Average rainfall for 10 wet seasons, 21.58 inches.
Number of clear days, 13.
" partly cloudy days, 4.
" cloudy days, 14.

NOTE—Barometer reduced to sea level. "T" indicates trace of precipitation.

METEOROLOGICAL SUMMARY SOUTHERN CAL., JANUARY, 1895.

STATIONS	TEMPERATURE Mean	Max.	Min.	Mean Barometer	Relative Humidity	RAINFALL Days	Am't	WEATHER Clear	Fair	Cl'dy	WIND Direction	Total Mov't
Los Angeles	52.	77.	37	30.02	76.5	10	5.84	13	4	14	E	2,868
San Diego	53.	77.	36.	30.03	77.0	11	7.53	17	6	8	NW-NE	4,046
Santa Barbara	51.7	72.	37.		76.5	8	6.25	15	5	11	W	2,408
Yuma	55.	75.	35.	30.01	51.	1	.78	19	7	5	N	5,523

OBSERVERS.—George E. Franklin, U. S. Weather Bureau, Los Angeles; M. L. Hearne, U. S. Weather Bureau, San Diego; Hugh D. Vail, Santa Barbara; A. Ashenberger, U. S. Weather Bureau, Yuma.

OUR ADVERTISERS.

COD-LIVER OIL: WHAT IS IT?

What can be said of its composition? Briefly, it is principally, first olein glyceride (70 per cent.) with variable quantities of stearin, palmitin (nearly 25 per cent.), and myristin glycerides, the latter increasing with the darker color.

Gautier and Mourgues found in yellow oils six definite bases—butylamin, amylamin, hexylamin, dihydrolutidin, asellin, morrhuin and morrhuic acid. It will be observed that they failed to find oxycellidin and nicomorrhuin. So far as the oily constituents, iodine, bromine, sulphur, phosphorus, biliary substances and free acids are concerned, there is virtual agreement in the results of analyses.

The physiological properties of the seven alkaloids have been determined by Gautier and Mourgues to be as follows:

Butylamin: In sufficient doses this produces in animals fatigue, stupor, vomiting and a certain degree of paresis. In small doses it excites the urinary secretions; in large doses it is at the same time convulsive and paralyzing; in medium doses it throws the animals into a sort of somnolence, with muscular paresis, but with complete conservation of the intelligence. Although poisonous, it does not produce death unless given in very large doses.

Amylamin: This is a very active base. In small doses it excites the reflexes and the urinary secretion. In large doses it provokes convulsive trembling, then regular convulsions and death.

Hexylamin acts almost like amylamin, but with less intensity.

Dihydrolutidin is a rather toxic base, even in small doses, when it produces a notable diminution of sensibility. In larger doses it provokes trembling and convulsions in the muscles of the face. With still larger doses in a guinea pig the trembling increases and becomes more general. Very lively periods of excitation are followed by profound depression with insensibility and paralysis of the muscles, especially of the posterior members. The animal gradually goes into an asphyxiated collapse.

Asellin is only a feebly active base. In sufficient dose it produces dyspnœa, stupor, convulsive troubles, and in large doses death.

Morrhuin is one of the most active principles of the oil; it is also in larger quantity—a little more than one-third of the total alkaloids. This is believed to be a powerful stimulant to the functions of nutrition and assimilation, producing a rapid circulation of the extractive residues of cell life towards the blood and kidneys, where they are eliminated, and in this way provoking indirectly a powerful movement of the assimilation. Virtually it is believed to increase the appetite and to provoke diaphoresis and diuresis.

As we read the results of these experiments, we cannot but be impressed by the fact that these symptoms are the symptoms of ptomaine poisoning. Without doubt, the alkaloids contained in morrhuol are putrefactive or cadaveric alkaloids, and of these amylamin, asellin, dihydrolutidin are assuredly poisonous and are so classified in Gould's table as modified from Vaughan and Novy. That any of these alkaloids are present in cod-liver oil when prepared at the place of the fisheries, by a proper process, is extremely doubtful. So far as I can learn, no analyses have been made of such cod-liver oil. To assume that morrhuol represents in any way the active therapeutic properties of cod-liver oil, is to asssume that cod-liver oil is useful only in the proportion that it is putrefied. My attention having been called to the reports of Lafarge (1885), and later of Germain See, I experimented with morrhuol

for several months, and, finally, convinced of its absolute failure. I abandoned its use. I was so thoroughly positive of its uselessness that the paper of Bouillot did not induce me to repeat my observations. If there are any medical properties in the preparations of the so-called active principles from which oil is removed, or which are removed from the oil, they must be entirely due to the other substances with which they are incorporated. The substitution of active principles in place of crude drugs is praiseworthy, when it is proved that these active principles represent the properties of the drug or possess in themselves definite physiological action. No digitalin, nor digitonin, nor digitoxin, has yet been isolated which fully represents digitalis; why then need we expect that alkaloids shall represent cod-liver oil, even if they arise from its putrefaction?

To what then can we attribute the beneficial action of cod-liver oil in wasting diseases? That cod-liver oil is a food, a food of especial value, because of its peculiar properties.

To quote Farquharson: "It has been proved by experiment that animal are more digestible than vegetable oils, and cod-liver oil is the most readily assimilated of all.

The free fatty acids contained also aid in emulsification and absorption from the alimentary canal. It improves the nutrition and supplies the fatty ingredients necessary for the growth and repair of the nervous system. It improves the quality of the blood, increasing the number of red corpuscles, and strengthens the heart muscle. Although the quantity of iodine, bromine and phosphorus is small, so far as their influence goes they are of use. Brunton has pointed out that, because it nourishes the young epithelial cells of the bronchial mucous membrane, enabling them to grow instead of being converted into pus, it is of undoubted efficacy as an expectorant. Thousands of lives would undoubtedly have been saved, had the profession understood that beef tea, as formerly made, containing scarcely more than the soluble extractives, possesses about as much value as a nutrient as urine.

Shall we now go on to administer the extractives of cod-liver oil, cadaveric alkaloids of demonstrated poisonous properties—of which the best that can be said is that one is diaphoretic and diuretic in its action and increases the appetite—and discard the really valuable constituents, which make up the food? A tuberculous patient can generate a sufficient amount of ptomaine without any assistance from the physician. It is the prevention of the formation, not elimination, that one seeks in treatment. An analogous procedure would be the administration of beef tea made from putrid meat.

How then shall we prescribe cod-liver oil? By emulsions, which are heavily charged with mucilage and contain water which favors rancidity? Of all which I have used—and every one which I could obtain has been used in my hospital and dispensary service—but one has been satisfactory, and that only when freshly made. For fourteen years I have used an oil of which the only recommendation it claimed was that it was obtained from fresh livers by cold expressison. It was of American origin, and on that account was not obtained from the cod when in as good condition as when off the shores of Norway. As it was, its use was far more satisfactory than that of emulsions or mixtures of whatever sort.

During the past few months I have used with great satisfaction the Improved Lofoton Cod-Liver Oil made by Parke, Davis & Co., which is simply an oil obtained on the site of the fisheries from the livers of the fish at the

time they are taken from the water. The process of manufacture is carefully carried out so that absolute cleanliness and freshness of the material shall be secured and that no decomposition shall take place. The disagreeable odor and flavor is removed, but no constituent important for its use as a food is taken out. Specimens kept for months have as yet shown no change. The problem seems to be solved. A food to be of its highest usefulness must be palatable; the most weighty objection is now done away with.

The oil should be given during the height of pancreatic digestion, one to two hours after eating, so that it may pass rapidly through the stomach and be absorbed during intestinal digestion. The stools should be watched that more shall not be administered than can be absorbed. If the oil should "repeat," a fact which I have not as yet observed, a few drops of ether added to the dose is likely to obviate that difficulty. The dose is from one to six teaspoonfuls. My conclusions are:

1. Cod-liver oil is a food, important because of its peculiar properties.
2. Since it is a food, no extractive can represent its value.
3. The purer the oil—the more free from cadaveric alkaloids—the more palatable will it be and the better adapted for its purpose.
4. The best that can be said of the cadaveric alkaloids is that they may possibly represent its eliminative, they certainly do not represent its constructive, properties.
5. It is not proven that the administration of appreciable quantities of the cadaveric alkaloids is devoid of danger.

THREE INCHES IN SIZE.

I have used two bottles of Phytoline "Walker," and reduced my weight fifteen pounds, and three inches in size around the waist; breathe freely and can walk with ease, something I have not been able to do in four years. I can now walk up a flight of stairs without stopping.

Marion, Ohio. H. L. HENSLEY, M.D.

REDUCED FROM 214 TO 185 POUNDS.

I am using Phytoline "Walker" on a lady who, nine weeks ago, weighed 214 pounds; was weighed last week, and had lost twenty-nine pounds, weighing only 185. She is much pleased with the medicine, and will continue until her weight is less than 160 pounds. J. H. WECKEL, M.D.

Breakabeen, N. Y.

ADHESION OF PLACENTA, WITH HEMORRHAGE.

I had a bad case of adhesion of placenta, with dangerous hemorrhage. With ergot and Sanmetto the danger was at once removed, and by continued use of Sanmetto, patient, although very weak from loss of blood, improved rapidly, and is now up and about the house helping about her work. In sixty years' practice, with an attendance upon more than three thousand child births, I have used no medicine that seemed to hit the case better than Sanmetto in this instance. I am now in my eighy-seventh year, and have practiced since 1832. S. G. MATSON, M.D.

Viola, Iowa.

SUCCUS ALTERANS IN ENGLAND.

Dr. William Richard Goodfellow, M.R.C.S., Roche, Cornwall, England, L.S.A., (London Hospital, Surgeon Roche and St. Anstell United Mines,) says: "I have used in practice the preparation known as Succus Alterans, and have much pleasure in bearing testimony to its great value. For diseases having their origin in a syphilitic source, I believe Succus Alterans to be the one reliable specific, for I may add that invariable success has been met with by me when prescribing the remedy in question, even after the failure of other alteratives. I shall continue to rely on the Succus Alterans in all cases I have indicated herein.—(Medical Reprints, London.

Celerina is indicated in nervous dyspepsia, accompanied by severe headache, nausea, acute pain in the epigastrium, etc.

For shaking palsy nothing excels Tinct. Aesculus Glabra, ½ drachm, and Celerina, 8 ounces. Teaspoonful every two or three hours.

Convulsions may frequently be cut short, like magic, by teaspoonful doses of Celerina repeated at short intervals. The nausea as an after-effect of chloroform or ether narcosis may geneally be controlled in the same manner.

Dr. Charles Day, M.R.C.S., etc., No. 79 St. Mark's Square, West Hackney, London, writes, on January 17, 1893: "I have prescribed your preparation, Iodia, with very satisfactory results. Its power of arresting discharges was very manifest in a case of leucorrhoea, and another of otorrhoea. In the latter case, the result of scarlet fever in early life, the discharge had existed for many years. The patient could distinctly feel the action of the Iodia on the part, and the discharge gradually dried up."

After an attack of the grip the patient finds himself in a state of extreme weakness and prostration from which condition he is tediously brought to former good health. Remedies which stimulate his exhausted nerves too vigorously do so at the expense of his general condition. Then comes the relapse. Syr. Hypophos. Comp. McArthur conveys to the tissues the revivifying and vitalizing agent phosphorus in its most oxidizable and assimilable form. Thus the true vitality of the nerve structure is restored by renewing the nutrition of the tissues themselves.

Sometimes physicians get puzzled, the same as statesmen. They have cases that they know are taking the proper mdicines, and yet the results are waning. All reasoning, investigation and consultation proves the treatment to be correct, while negative results proves that something is radically wrong. In these cases the system is too weak to respond to the treatment. Combine a tissue builder with your treatment, and the result will be magical. Coulver Glycerine is the strongest tissue-builder known and mixes uniformly with all medicines or water.

Office of ASA HORR, M.D., No. 1311 Main Street,
Dubuque, Iowa, December. 5, 1894.

Theodore Metcalf Company, Boston, Mass.:

Dear Sirs: The bottle of your Coco Wine, mentioned in yours of the 3d. came duly to hand, and has been all used in a lady patient with threatened lung trouble and great debility, with depression of spirits. She improved greatly under its use. Should she seem to demand it, I shall resume the administration of your Coco Wine, and bear it in mind for other cases. Thanks for your favor. I remain, very truly yours, ASA HORR, M.D.

The proprietors of Tongaline and Ponca Compound have just issued a neat and convenient Physicians' Pocket Diary and Daily Memorandum Book, which contains much useful and valuable information for the general practitioner. It was the intention to have one in the hands of every physician in the United States by January 1, but if, through an error in addressing or negligence on the part of the postoffice officials, any physician should not have received a copy, it will be mailed on application to the Mellier Drug Company, No. 2112 Lucas Place, St. Louis, Mo.

At this season of the year, when radical and sudden thermal changes are the rule, it becomes of vital interest to the busy practitioner to have in compact, ready form, such approved medicaments as meet the analgesic and antithermic requirements of the bulk of his patients. As pertinent we call attention to the following combination tablets: "Antikamnia and Codeine," each containing 4¾ grains antikamnia and ¼ grain codeine, "Antikamnia and Quinine," each containing 2½ antikamnia and 2½ grains quinine. "Antikamnia and Salol," each containing 2½ grains antikamnia, 2½ grains salol, and "Antikamina, Quinine and Salol," each containing 2 grains antikamina, 2 grains quinine and 1 grain salol. These, together with the well-known "Antikamnia Tablets," of varied sizes, and "Antikamnia Powdered," constitute indispensable factors in the armamentarium of the physician, and are more than ordinarily indicated in present climatic conditions.

SOUTHERN CALIFORNIA PRACTITIONER.

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ORIGINAL.

THE PHYSICIAN'S RELATION TO THE PATIENT WITH REGARD TO DIAGNOSIS AND PROGNOSIS.

BY KLAUS HANSEN, M.D., PARIS, FRANCE.

One Sunday morning some years ago I took a journey by rail with a Prussian colleague. In the same carriage was an elderly woman from Teidalen, whom I the day before had told that she suffered from cancer in the stomach. The woman, whom I had known for some years as an exceptionally high-minded and intelligent woman, had received my communication with a serenity of mind that made a deep and lasting impression on me. I told my colleague what had happened between our fellow-traveler and myself the day before, and, quite astonishd, he exclaimed: "Do you dare to communicate such a diagnosis to your patients? If we did such a thing our practice would forever be done with."

I found that this opinion was shared by a celebrated Berlin physician, in whose consulting-room I met a patient, who came to consult him on his way to Carlsbad. Cancer was diagnosticated, and the man was sent home; it was superfluous to go to Carlsbad. He might go home again, and would soon recover, without going to Carlsbad, and was to take a letter to his physician with an intimation of the treatment he ought to have.

This system of concealment is maintained not only towards the patients, but also towards their relations. I once sent a patient to one of the most celebrated clinicians in Germany, and received a letter from him, in which he diagnosticated cancer—the patient died soon after return home. Although the patient earnestly requested the doctor to tell him the whole truth, he not only repeatedly assured him he fully believed that he would recover and that they would meet next summer, but also the patient's wife, when she

went to him to get a true statement of the case, received the most unreserved assurance of her husband's recovery.

Such an uniform conduct of different physicians towards the patient and his relations cannot depend on an accidental circumstance, but must be owing a generally accepted view of the relation of the physician to the public in this question: and this principle has its expression in the following observation of Leyden's: "The patient must before all things not know, and not believe, that he is suffering from an incurable (cancerous) disease, and it is the first duty of the physician to conceal the sad truth from the patient."

My opinion is that it would be advisable to put this system of concealment to test, and I have therefore wished to bring it forward, that it might be discussed among colleagues, although the public must certainly have every right to have a voice in the decision of this question, as well. I don't think that the principle is acted on in Norway as rigorously as seems to be the case in Germany, particularly not by the younger physicians, but I am hardly mistaken in believing that even in our country it is inforced pretty strongly.

One reason for the principle of concealment is, I suppose, the consideration that the certainty of suffering from a serious or even incurable disease, which sooner or later will involve death, will entail a depression of mind which will again react on the disease and hasten on its development. A second consideration is perhaps that the knowledge that the disease is incurable and mortal may embitter the last days of the patient's life. By depriving him of the hope of recovering his health, he is deprived of a power which might help him to bear pain and illness with patience and fortitude. And, I suppose, it is this consideration which underlies the principle of concealment towards the relations of the patient. By depriving them of every hope of recovery for their dear ones, the time left for being together is made even more trying still than the disease and its trials must necessarily make it.

Let us consider these views a little: First, the exacerbation of the disease by the dreaded depression of mind of the patient. In this we must distinguish between serious, but at the same time not incurable, diseases and those that are absolutely incurable. In the case of the former a view different from the one mentioned before may be taken. In serious chronic diseases, which, however, have not advanced so far that every hope of recovery must be given up, any treatment which can give any hope of the patient's restoration to health will, as a rule, greatly tax the patient's energy. He is not only an object who is being treated, he must be made to act himself, to submit to all sacrifices and punctually to carry out all the measures which are essential if the disease is to be treated with any chance of a favorable result. Just think of phthisis. I have not the smallest doubt that the energy of the patient himself is an essential factor of the treatment of this disease, and it is the task of the physician to stimulate this energy; but it cannot be stimulated by concealing the true nature of the disease and by reassuring the patient with a confident hope of recovery. The energy of the patient will, in my experience, be stimulated much more vigorously when he is told, without reserve, the nature of the disease, and the best way to check and eventually to cure it, insisting all the time on the necessity of the patient himself working for a favorable result of the treatment.

It is no use trying to cheer the patient with euphemistic phrases, such as

telling him that he has not consumption, but probably tuberculosis or only mucous in the lungs. But, on the other hand, the doctor certainly is justified in making the prognosis as favorable as possible. We have seen that even the worst cases of phthisis are sometimes checked in their development for many years. It is therefore both expedient and right to strengthen the patient's energy by making the prognosis as favorable as possible, but not beyond what we on mature reflection consider possible.

Have we decided that the work for recovery must be considered quite useless, and only trying to the patient, the case must range with the diseases that are absolutely incurable, as, for instance, cancer.

The question now is: Will, in these cases, the knowledge of the true nature of the fatal disease depress the patient to such an extent as to exacerbate his condition? It is no use arguing; experience must speak for itself. The answer must essentially be one with the second point of the argumentation of the principle of concealment; the influence which the knowledge of the truth will have on the patient's mind: Will his last days be saddened by his being deprived of every hope?

My experience is that they will not. When I began practising I acted up to the principle of concealment; I thought it could not be otherwise. But I did not like it at all; every now and then I broke through it, and I liked it because I found that it also did the patient good. I began doing it more frequently,—the exception was made the rule, and the new rule has, during the course of years, had very few exceptions. For a long time I thought that I ought to conceal the truth from young people, young girls in particular; but over and over again they put to shame my fear and my distrust in their fortitude of mind, so I have included them as well among those who, even in the most serious circumstances of life, are the gainers by knowing the real truth. Most patients who are suffering from a chronic disease suffer in their mind, partly as a consequence of the direct influence of the disease on their strength, and thereby also on their spirits, but also partly because they constantly find their hope of recovery being disappointed. Instead of getting better they are always getting worse, every fresh hope for a change for the better ends in disappointment; the result of this is bitterness, discontent and disconsolateness. With many patients it leads to their consulting one physician after another, and to their trying one "unfailing" remedy after another. Always fresh hopes, but always fresh disappointments as well.

And now, what influence would the exact truth have on these patients? On the whole, I feel almost inclined to say invariably a good one. I don't want to speak of our peasants, but the answer they generally give is: "I thank you for letting me know; I shall go home again now and will try to submit to God's will." Their composure is the composure of the stoics. But it is not only the case with the peasants. The result is, generally, not depression but calmness of mind. The time it takes the various individuals to obtain this calmness of mind will of course vary, but generally it is only a comparatively short time. Instead of the old hunting for new remedies and fresh hopes, comes resignation and the old impatience at the slow recovery is superseded by gratitude for any relief they may get. The patient has a higher aim (for his thoughts) than doctor and medicine, and it engrosses him. It is, in a way, a new stimulus which adds to his energy and thus gives him peace. I have very rarely seen what I should call actual fear of death in patients who suffer from a chronic disease; and where I

have seen it, it is always in the individual to whom death comes unexpectedly. Those who have had time to reconcile themselves to the approach of death await it calmly. In most cases their religion helps them to this; but even without it, the result generally is the same. I have not seen any great difference in the fortitude of mind with which religious or irreligious people await death.

I remember, among others, an irreligious man, about 50 years of age, who died from cancer. On the morning of the day he died he dictated to his wife a valedictory poem to a friend. When I saw him in the evening he suffered greatly. I proposed to give him an injection of morphia, but told him at the same time that if he fell asleep it was uncertain whether he would ever awake again. "I don't care; I suffer so, and"—here he turned to his wife—"we have said what we wanted to one another, haven't we?" He had the injection of morphia. About midnight I saw him again. His face lighted up. "Oh, I have been so comfortable; I have not slept, but have been very comfortable. We have had such a long talk together, and I feel as if I have been given a few extra hours to live in." Some hours after he died.

This is my experience. Prepare the patients in time for the approach of death, and they will receive the information with a calmer mind.

Another thing is: Have we a right to conceal their true state from the patients when they expressly ask to be told? In my opinion we have no right whatever to do such a thing. To die is such a serious thing that every person has a right to ask a candid answer. I am not thinking of the fact that there may be a great many things a man may want to arrange before he leaves this world, but irrespective of this, only considering the great importance it must be to his own self, we have no right to conceal the truth; and this consideration it seems to me must be decisive in the face of any objections. In my opinion the relatives of the patient have the same right to learn the exact truth, particularly when they ask to know it.

It is hardly necessary to say that my view of this case must, above all, not lead to one's carelessly giving a bad prognosis, without absolute certainty, if there is any doubt, either because the prognosis itself is doubtful, or because the disease leaves open possible chances of recovery, we will all, and rightly so, try to put the possible chances in as favorable a light as possible. What I have been calling attention to here, can, for this reason, only be applied to chronic diseases. To allot to a patient a certain time to live—weeks, months or even years—is a thing we ought never to commit ourselves to, if only for the reason that it is far beyond our powers.

It is also, I suppose, inevitable that the proper time and way to do it must be chosen with great care. You will understand how difficult I find this when I tell you that I often suffer for days beforehand when I have to "speak out" to a patient or his relations.

In connection with this question is another which I want to mention here, viz., the assurance with which we speak to our patients about our knowledge and the extent of it. I am going to illustrate what I mean by quoting a conversation I had some years ago with two Danish colleagues, both well-known men. One of them was of rather a pessimistic disposition; he regretted that his profession often forced him to act in a way which he could not but describe as dishonest. "I am, for instance, treating a child who is suffering from meningitis, and, out of consideration to its parents, I must do something, give it something, although I know that it is all of no use."

"But why do you do, then?" I asked. "Why don't you say to the parents: 'My conviction is that this is meningitis, and in that case what we can do is of no use, and the only hope for the child is that I may be mistaken.'" "But it would never do to say such a thing," said a third colleague. "In deed, it will; I have tried it a great many times, and I have never heard an unkind word from the parents nor felt that they have shown me less confidence because of it. I often take a colleague with me for the sake of the parents as well as for my own; but the parents often don't care for it even." It seems to me that such a method would place both our science and our reading of our fellow-men one degree higher. We should have advanced one step farther than Moliere's savants, who would not admit that they could be ignorant of anything between heaven and earth.

A RESUME OF RECENT VIEWS OF ECTOPIC PREGNANCY, WITH A BRIEF RECORD OF TWO UNUSUAL CASES.*

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Before commencing the subject of my paper I desire to express my deep sense of the kindness and courtesy shown to one who is so young a member of this society as myself in the invitation to present a paper before you this evening.

The choice of a subject is a matter of grave consideration, because I can not appear before you as a pioneer, who has just carved for himself a new path through the mazy forests of science and entertain you with the results of new discovery or anything startlingly fresh in the vast domain of surgery, but only as an ordinary plodder along already well-beaten tracks, and therefore I can only seek to elicit discussion by rehashing matter, of which many of you may have a better knowledge and more experience than I have.

In the older works on obstetrics, it is true, you will find a small space devoted to extra-uterine foetation, but the subject was treated as though the condition, while possible, were one of extreme rarity; its etiology and pathology was not at all understood, and any treatment for such condition hardly imagined.

Owing to better methods of examination, increased knowledge in the way of diagnosis and the larger experiences we now possess of intra-abdominal conditions (due in no small measure to the wonderful impetus surgery has received from modern bacteriology) we stand today in this position with respect to the subject of "Ectopic pregnancy" (and here I would, for the moment, digress to insist that this is a better term than "extra-uterine," as it includes within its meaning pregnancy in the interstitial portion of the tube, it being "ectopic," but not "extra-uterine"). We know that ectopic pregnancy must occur with tolerable frequency, as almost every surgeon, who has even a slight experience in abdominal surgery, has to deal with this grave condi-

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tion, and that in a certain proportion of cases it can be diagnosed early, with, at all events, as much or as little certainty as any other intra-abdominal lesion, and that its treatment is hopeful if diagnosed early, i.e., before rupture takes place, and certainly not hopeless, if promptly attended to after rupture, the latter condition, however, complicating the prognosis.

Those who have experience in abdominal work will readily admit that there can be no such thing as certainty of diagnosis until the peritoneal cavity becomes accessible to hand or eye or both by exploratory incision.

As regards etiology we cannot at present say very much, as opinions still differ as to causation, but the whole question is of much interest to the general practitioner, for he it is who in the greatest number of instances first sees the case, and whether he is prepared to undertake the operative treatment himself, or whether he refers the case to some one else for operation, the responsibility for not diagnosing or suspecting the condition will be largely on his shoulders. So well versed, however, is the general practitioner of today that it is rare to find either this or other grave conditions escaping his attention.

Modern views regard the tube as being practically the only site of ectopic pregnancy. The idea of ovarian pregnancy is practically abandoned, though the extremely rare possibility of tubo-ovarian pregnancy is admitted, where the fimbriae of the tube are spread over and adherent to the ovary; also the primary occurrence of abdominal pregnancy is now regarded as an exploded theory, so that for practical purposes the varieties of ectopic pregnancy admit of classification only as:

(a) Tubal.

(b) Tubo-uterine.

Concerning the etiology, as I have said before, there are various theories, all of them more or less speculative, so that nothing is definitely known on this point.

Tait says that the uterus only is the seat of normal pregnancy, and that as soon as the ovum is impregnated it becomes attached to the uterus, and that it is only in cases in which the ciliated epithelium of the tube is destroyed by disease that the ovum is retained in the tube (where it may either die, be discharged, or become impregnated). He ascribes to the ciliated epithelium the functions of preventing the entrance of spermatozoa into the tube and of assisting the ovum on its journey to the uterus, and holds that its absence enables the crypts in the mucous lining to furnish a suitable nest.

Against this we have the views of Bland Sutton, who holds that an inflammation of the tube which has destroyed the epithelium has been at the same time sufficiently severe to occlude the abdominal ostia and set up other changes in the tube. He has failed to discover, in the majority of instances, any evidence of destruction of epithelium or past salpingitis after the most careful examination. Be this as it may, the most commonly accepted theory is that ectopic pregnancy is due to some endo-tubal lesion obstructing the passage of the ovum.

Our knowledge of the pathology is limited to—

1. Changes in the tube.
2. Changes in the ovum.

The first result of detention and growth of the ovum in the tube is a temporary thickening of the tubal wall due to increased blood supply, but as growth proceeds and proportionately with the development of chorionic villi,

this condition changes and the tube wall is expanded and becomes thinner, while the fimbriated end is narrowed, and, finally, about the eighth week, becomes occluded. Prior to this occlusion we can have either tubal rupture or tubal abortion; after occlusion but one condition is possible—that of tubal rupture.

The cause of rupture may be from violence outside, or from changes within, viz., hemorrhage from separation of the tubo-chorionic vessels. Rupture may be intra-peritoneal or extra-peritoneal (i.e., into or between the folds of the broad ligament).

The most frequent change which takes place in the ovum is the formation of the so-called "apoplectic ovum" or "tubal mole," a condition which obtains when the death of the foetus occurs early, with hemorrhage into its membranes; and the occurrence of a "tubal mole" appears to be one of the most frequent causes of inducing tubal abortion, prior to the eighth week, or later tubal rupture.

In the majority of instances the pregnant tube aborts, or ruptures before the twelfth week after impregnation; in abortion the escape of blood is necessarily intra-peritoneal. After rupture, hemorrhage in the greater proportion of cases is also into the peritoneal cavity.

The prognosis is affected mainly by the consideration whether the case is seen prior to or after rupture, and whether the rupture is intra or extra-peritoneal. Intra-peritoneal rupture is generally speedily fatal, either from shock, due to loss of blood, or to secondary changes—peritonitis.

Symptomatology.—Croom arranges the symptoms of ectopic gestation of the early months in the following order:

(a) General or reflex symptoms of pregnancy, especially if the pregnancy has occurred after a considerable period of sterility.

(b) Disordered menstruation, especially metrorrhagia, coincident with symptoms of pregnancy, gushes of blood, accompanied by severe pain.

(c) Severe pain in the pelvis, attacks of pelvic pain, followed by tenderness of the iliac region and other symptoms of pelvic inflammation.

(d) The existence of a growing tumor, presenting characteristics of a dense cyst, sensitive to touch, actively pulsating and steady.

(e) The os patulous, the uterus displaced and empty.

(f) Paroxyms of severe and spasmodic pain in the pelvis, with general symptoms of collapse.

(g) Expulsion of the decidua wholly or in part.

He would make a diagnosis upon the following four grounds:

1. The general signs of pregnancy, i.e., the cessation of menses.

2. The displacement of the uterus to one side by the tumor, which gradually grows.

3. The passage of the decidua in whole or in part in an irregular hemorrhage.

4. The presence of paroxysmal pain localized to one side, though not to one spot.

Baldy considers the various symptoms usually presented to be of negative value, and says: (1) In a certain proportion of cases, in the early stages, the diagnosis is easy and unmistakable; (2) in a certain quite large proportion of cases sufficient symptoms are present, more than sufficient to warrant a diagnosis of ectopic pregnancy, such a pregnancy not being present; (3) in a

certain other proportion of cases the symptoms until rupture has occurred are entirely wanting, and are of such dubious character as in no wise to warrant such diagnosis.

To properly discuss the question of diagnosis it is necessary to divide the subject into—

1. The period prior to abortion or rupture of the tube.
2. That subsequent to the same.

Prior to rupture the rule should be axiomatic to always keep before one's mind the probability of ectopic pregnancy when examining (a) a pregnant woman with any mass behind or at the side of the uterus, or (b) one whose menstrual history gives irregular symptoms of pregnancy, and who has in addition to nausea, sensitive breasts and a softened cervix, a distended tube at the side of the uterus. Unfortunately, fewer opportunities are given us for making diagnosis prior to rupture, than are afforded after its occurrence, as in a large proportion of cases the patients experience few, if any, abnormal symptoms.

A great deal has been written on the diagnostic signs, but so far it appears to me that there is no one sign or combination of signs which can invariably be regarded as pathognomonic,and this mainly because some other abnormal condition may co-exist with ectopic gestation.

Prior to rupture the train of symptoms of a hydro or pyo-salpinx may easily be taken for those of ectopic pregnancy or vice versa, or the two conditions may be contemporaneous, as in one of the cases I shall briefly relate to you.

As regards treatment the concensus of opinion appears to be that extra-peritoneal rupture, known by the circumscribed mass, lateral-fixed position and compression of the rectum, as a rule does not call for immediate operative treatment, but that the patient should be kept absoluely at rest, etc., in the hope that absorption will take place; but that suppuration, repeated hemorrhage into the sac or continued foetal life necessitate operative interference; that cases in which diagnosis is made prior to rupture, or in which rupture has taken place, demand the most active surgical treatment—viz., abdominal section. Electricity for a long time had its advocates, and may still have a few, but it is generally conceded that in the treatment of this condition it has been found wanting, and must give way to the more surgical plan.

Much difference of opinion exists as to whether, in the event of shock following rupture, operation should be performed immediately, or deferred until the pulse shows signs of improvement. As this shock is for the most part dependent on hemorrhage, it appears the better course to open the abdomen and control the source of the hemorrhage—viz., the ruptured tube—without waiting for any improvement of the pulse, notwithstanding the fact that the first hemorrhage is not necessarily fatal, but that is something which none can foretell.

Although I think that, as a rule, it is hardly fair to inflict reports of cases on a society of this kind, two of the cases of ectopic gestation with which I have had to deal have been, if not unique, at all events so uncommon that, with your permission, I will briefly relate them.

R. L., age 28, married five years. One child living aged 14 months. Several years ago had an illegitimate child, the birth of which was productive of bilateral laceration of cervix and loss of perineal body, which gave rise to the usual consequences. Between the birth of this child and her marriage, her mode of life was irregular, and she had at all events one attack of gonorrhoea.

Six months after her marriage had a rather severe attack of pelvic inflammation, attended with high fever, etc., greatest pain being referred to the left ovarian region. Recovered from this, and declined to submit to any local treatment. Her pregnancy presented nothing of importance, and terminated in a fairly easy confinement. Beyond suffering from the same train of symptoms complained of prior to marriage, due to the laceration, etc., above alluded to, her convalescence was unimpeded. She was still suckling her baby, and had not menstruated since its birth, and was in her usual state of health up till the night of November 3, 1892, when, in consequence of a sudden and severe pain referred to the right iliac region she was forced to send for her medical attendant, who prescribed an opiate. The following morning, when again seen by him, she expressed herself as much relieved. Early on the morning of the 5th (2 a.m.) he was again sent for, as the violent pain had returned, and she had had a severe flooding. Arrived at the house he was shown a wash-hand basin two-thirds full of blood-clot, in which was discovered a foetus, judged to be between the third and fourth month. The flow of blood continued more or less severe and the pain in the right iliac more or less severe (dependent on the administration or otherwise of opiates) until the evening of November 11th, when the medical attendant asked me to meet him in consultation.

The patient was lying in bed on her back, right knee drawn up, countenance very anxious, markedly anemic, temperature high and pulse rapid, weak and easily compressible. Great pain was complained of more or less over the abdomen, but especially over the right side, over which percussion gave a dull note; the bowels had acted frequently, their movement causing severe pain. There was a profuse bloody and foul-smelling discharge from the vagina. In answer to my inquiries the medical attendant stated that though he had not seen it himself, the old woman, who acted as a miserable apology for a nurse, assured him that the placenta had come away with blood-clot, and had been thrown away by her.

I made an attempt at vaginal examination, but had to abandon it, owing to the severe pain it caused, and as it was then late at night and the house was utterly unsuitable for anything surgical, the patient was removed to the female hospital, where the following morning I proceeded to examine under ether.

November 12th. On examination Douglas pouch was bulged down with a semi-solid and elastic tumor, the bimanual method showing that to the right of the cul-de-sac there was a firmer and immovable tumor. The uterus was large, bulky, anteverted and pushed over to the left. The cervix easily admitted the finger, which discovered a placenta with its funis, highly decomposed. This was removed, and the uterus thoroughly irrigated. The uterus and vagina were then lightly packed with iodoform gauze, and the patient returned to bed.

November 15th. Patient's condition showed marked improvement. The circumstances were explained to her and her husband, and she was strongly advised to submit to abdominal section, but mainly in consequence of the improvement in her condition, permission was refused. Packing removed from uterus and vagina.

From this time till the evening of the 18th the improvement had continued, temperature had fallen to normal and the pulse had gained strength. During the night, however, she was again seized with violent pain in the right iliac region, and her condition speedily became one of collapse. Abdominal sec-

tion was again urged as the only available measure, and her husband's consent obtained.

November 19th, 9 a.m. Pulse 140 when patient was etherized. The abdomen was opened in middle line. Immediately on opening the peritoneum a large quantity of liquid and coagulated blood escaped. After tearing through numerous adhesions, the firm and immovable tumor proved to be the right ovary and tube enormously enlarged, and these had to be carefully separated from bowel, to which they were completely matted. The pedicle was ligated and they were removed—an enormous quantity of blood-clot was removed from behind the uterus. Left ovary and tube were normal in size, but bore traces of old inflammation, some old adhesions were rapidly separated. The abdomen was thoroughly flushed with hot sterilized water and a glass drainage tube, packed with iodoform gauze, inserted. The wound was closed with silkworm gut and dressed in the usual manner. An enema of brandy and egg was given and the patient put to bed. Time occupied by operation forty minutes. Two hours later there was a fairly good pulse, and it was in every way apparent that the patient was rallying.

9 p.m. Tube removed, as the iodoform gauze was hardly soiled. Ordered magnes. sulph. 3 ounces in a little hot water.

November 20th. Bowels moved during night, and passed flatus several times.

From this time on there was nothing of importance to note, the patient making an uninterrupted recovery.

For the examination of the tumor and the following report I am indebted to my friend, Dr. R. E. McKechins:

The mass consisted of the fallopian tube, with an enlargement in it, somewhat globular in shape, and the ovary. The fimbriated extremity of the tube was completely adherent by its fimbriae to the upper and anterior surface of the ovary. On tearing down these adhesions, which were not very recent, a corpus luteum was disclosed in the ovary. It had been completely hidden by the adherent fimbriae. This corpus luteum was about one-half inch in diameter, of a bright yellow color, and its cavity contained some clear serum. Nothing abnormal was noted microscopically about the ovary. The globular enlargement in the tube was about 3¼ inches in diameter. It was situated immediately after leaving the ovarian orifice of the tube (which latter could not be made out), so that the tumor could not be classed as tubo-ovarian. It was distinctly intra-tubal.

The tumor consisted of the distended tube itself containing a mass of recent blood-clot, infiltrating a friable tissue. This mass could be peeled off the inner surface of the tube,leaving a rough surface. In its center was a small cavity, about the size and shape of an almond, lined by a distinct, glistening, pearly membrane of very delicate texture. Nothing was found in this cavity. A rent existed in one side, through which contents might have escaped, but there appeared to be no loss of its substance and no appearance of a funis. The tumor itself had a rent in it, with black clotted blood about its margins, one-half inch in diameter on its posterior surface, low down, penetrating not only the distended wall of the tube, but the contained tissue. Its position (i.e., the tumor's) was about half buried in the broad ligament, half protruding into the peritoneal cavity.

Microscopically, embryonic villi were easily made out in the contained tissue, proving the origin of the growth. I would class it as a "tubal mole," after a recent nomenclature, and think it of about two months' age.

The second unusual case of ectopic gestation was that of N. C., aet. 20, nulliparous, a prostitute, whom I was asked to see in consultation in August, 1893, and whose history, briefly, was as follows: Had gonorrhoea twelve months previously. The last few weeks before had been suffering from metrorrhagia. Three weeks before seen by me, while menstruating, took a prolonged cold bath, resulting in the cessation of menstruation. Then commenced to have severe pelvic pain, in consequence of which she had to keep her bed and send for a doctor. Had had high temperature for several days (and frequent doses of morphia to control pain,) when after a severe exacerbation of pain she became partially collapsed, and I was then asked to see her. At that time she had a markedly abdominal face, was lying with her knees drawn up, constant inclination to vomit, subnormal temperature, weak and thready pulse. There was nothing in the history of the case, nor appearance of the breasts, etc., to excite a suspicion of pregnancy. Owing to pain it was imposssible to make an examination until the patient had been etherized.

On examination I found the uterus lifted up toward the abdominal wall and anteverted; on the left could be felt an enormously distended tube and enlarged ovary, while on the right there was a bulging tumor, with some harder and more consistent body behind. Thinking that this was a ruptured pus tube, I had the patient removed to hospital, where I performed abdominal section. On opening the peritoneum blood clot welled up, as there appeared to be no active bleeding for the moment, it was deemed advisable to examine and deal with the left tube first, and it was fortunate that it was done, as a large bead of cheesy pus had formed its way out of a thin-walled and enormously distended tube. Adhesions having been separated, this ovary and tube were removed, and attention then given to those of the right side. The fimbriae of the right tube were spread over and adherent to the ovary, a rent was discovered in the tube, partly extra, but nearly entirely intra-peritoneal, the right ovary and tube having been removed, and all blood clot cleared out, the abdomen was flushed, a drainage tube inserted, and the wound closed and dressed as usual.

The drainage tube was removed about twenty-four hours after operation, and convalescence was established without anything noteworthy.

I am again indebted to Dr. McKechine for having undertaken the examination of the right ovary and tube. His report is so similar to the one in the former case that it would serve no purpose to give it to you at length; suffice it to say that he discovered embryonic villi, although there was no appearance of a foetus, and that this case must also be classified as a tubal mole. There are several points of interest in both these cases, but inasmuch as I have already occupied more than my share of your attention, I will content myself by simply remarking:

1. That in neither case were the patients cognizant of pregnancy.

2. That in case 1, it is evident there had been a twin pregnancy, one normal—in utero—the other abnormal—tubal. The tubal had not developed after the eighth week, while uterine pregnancy must have proceeded for at least twice this period. Whether the tubal rupture was the cause of uterine abortion, or vice versa, I cannot of course definitely determine.

3. That in case 2 the co-existence of a pus tube on the other side was a complication which in itself was enough to baffle a correct diagnosis.

4. That it is unusual to meet with ectopic pregnancy in a nulliparous woman.

Potomac Block.

END TO END ANASTOMOSIS.

BY J. T. STEWART, LOS ANGELES, CAL.

A gentleman, aged 38, consulted me concerning an obscure and painful abdominal condition. Several of my medical friends examined the case with me. We were unable to reach a definite diagnosis. I suggested exploratory procedure. This examination revealed carcinoma of colon six or eight inches above cecum. Assisted by eminent gentlemen of this city I resected eight or ten inches of the colon, along with the cecum, making an end to end anastomosis of ilium and colon. In dealing with the gut I cut wide of the cancer, as I did also with the mesentery. The button passed on the sixteenth day. The gentleman is about ready to go from the hospital. The extreme vascularity of the parts made the resection rather bloody and tedious. For simplicity and ease of application the button is a marvel. It renders intestinal work fascinating.

Burdick Block.

A CASE OF TETANUS.

BY J. LEE HAGADORN, M. D., FULLERTON, CAL.

G. M., German, aged 30, consulted me on the afternoon of March 1st. He had stepped upon a rusty nail the same day, and sought medical aid because of the pain and swelling, the very trivial appearing wound had occasioned. I found a small punctured wound upon the plantar surface of the left foot. The depth of the wound was about 3½ m.m. The swelled appearance of the limb was occasioned by impeded circulation in the great saphenous vein, which was compressed by the rapid enlargement of the glands at the saphenous opening. The wound was freely opened and cauterized, and the foot immersed for several hours in a very hot solution of permanganate of potassium, after which patient was put to bed with foot elevated. Sulphide of calcium, gm. .01, was given every twenty minutes until the body exhaled an odor of sulphuretted hydrogen. The patient exhibited symptoms of shock. On the following morning the patient was found walking about barefooted, the wound daubed with shoemaker's wax, soap and sugar. The physician was dismissed, the patient considering home treatment cheaper and more effective. Four days after I was called, and found the patient with well-developed tetanus. Trismus and contraction of the muscles of back and cervical region were present, and the patient was bathed in perspiration. The pain was agonizing, and there was a slight twitching of muscles from time to time. Deglutition painful and difficult. Temperature normal, pulse 130.

Consultation was at once asked for and granted, and my friend, Dr. Perdomo of Anaheim saw the case with me the same morning. The wound was again incised and cauterized. Heroic doses of chloral were administered, beginning with gm. 1.3 every two hours, and increasing to gm. 3. When the suffering became intense, morphia and atropia was given hypodermatically. For spasms, when intense, chloroform inhalations. The spasms, in spite of every effort to maintain the utmost quiet, occurred at intervals of a half-hour to forty-five minutes at first, but finally became more and more frequent and longer in duration. As the patient became weaker, every means of stimulation was used, but I found that the prick of the hypodermic needle was invariably followed by a severe spasm. When deglutition became impossible the motor depressants were administered per rectum. As soon as the disease was recognized, tetanus antitoxine was wired for, but could not be had nearer than New York City.

Opisthotonos became marked on the morning of March 6th, and the patient expired at 2:30 the same day, thirty-two hours after the spasm first manifested itself. The last spasm was frightful in the extreme, the face becoming deeply cyanosed, the tongue nearly bitten off, and a seminal ejaculation occurring at the height of the paroxysm. Rigor mortis appeared within five minutes after death. Treatment seemed to have not the slightest effect, except to cause slight stupor.

GUAIACOL—NOTES ON IN QUINSY, ERYSIPELAS, ETC.

H. W. YEMANS, M. D., SAN FRANCISCO, CAL.

Some time ago I saw mentioned the use of guaiacol in quinsy, and determined to take advantage of the first opportunity that offered to test its efficacy. I had not long to wait, as within a few days a patient came to me whose case would afford a most excellent proof of its worth or worthlessness, for he had been a sufferer for years from recurrent attacks, which treatment, so far, had not benefited in the least—the attacks invariably lasting from two to three weeks, the patient being very ill during the whole of that period. I persuaded him to not enter the hospital, as he usually did, but to submit to a trial of the remedy as an out-patient. The guaiacol caused him considerable distress when applied full strength, but this, together with the profuse flow of saliva which it caused, soon ceased. He did not return next day, as directed, but his wife came to obtain some of the drug for self-application. She reported him as not feeling near so bad as was usual with the attacks, and said that he would call in person next day, if in condition to do so. When he came into the office the following morning, he could hardly contain himself, his joy at the total disappearance of every sign and symptom of the trouble was so great. I made a most careful examination of the mouth, tonsils and pharynx, but, barring a slight redness, there was absolutely nothing abnormal to be found. The temperature, 38.2 degrees C. two days previous, was normal—in short, he was again a perfectly sound man. The next case upon which I experimented was one of erysipelas of the face. Six months previous this man had been admitted to the hospital, where he remained some three weeks suffering from a severe attack of facial erysipelas. His condition was at this time identical with that of six months before, and there was every indication that the attack would be equally severe.

I persuaded him to submit to the trial of guaiacol, and applied it as follows: First, the affected part was well painted with guaiacol and allowed to dry; then, on top of it, collodion was applied. This was repeated next day, and the following day he appeared with hardly a noticeable indication of the disease. Since the foregoing I have treated a number of cases of suppurative tonsillitis, with only success to record, but have seen no more erysipelas. I have attempted to ascertain if it possessed any virtues in tubercular and syphilitic local manifestations. While too brief a time has elapsed to state results positively and accurately, still, from its action so far, I am convinced that it will prove a valuable agent therein, especially does it promise well in syphilitic ulcerations about the mouth.

I propose to greatly extend my observations in this direction, and shall report progress and results from time to time.

ATRESIA VAGINAE.

BY H. NEWLAND, M.D., LOS ANGELES, CAL., LATE PROFESSOR OF CLINICAL OBSTETRICS, RESIDENT ACCOUCHEUR OF LYING-IN INSTITUTE, ETC., ST. LOUIS, MO.

Atresia vaginae is a rare lesion. In delivering over ten thousand women, I have found but three cases of it. It may be partial or complete. In the two cases seen before the one which I am about to describe, there was only a band across the upper part of the vagina, which in the second stage of labor I had to push back to make room for the fetal head to pass. In the second case it was so large that I had to have my hand, during the whole second stage, in the vagina, to hold the band upward so as to allow the fetal head to pass. In this second case the woman in question had been delivered in her first labor by a midwife, and the child was still-born. I presume the midwife did not know how to manage the band, and the fetus suffocated in the vagina before birth. I delivered her nine times afterwards with living children.

Now, I will relate to you a case which I would call "Complete Atresia Vaginae." On June 2, 1893, a woman came to our lying-in institute in St. Louis, Mo., for confinement. She was a native of Illinois, German descent, 23 years old, single, primipara, medium size, weighing about one hundred and forty-five pounds, healthy, and with no hereditary history. At the time of her entrance, she said she was seven months pregnant.

As it was not my practice to examine patients at the time of entrance unless they complained of pain or had gone over their time, I did not learn anything of this patient until August 14, 1893, when I came back from my summer vacation. I then found that she had gone two weeks over the time, as stated by her at the time of entrance. I was astonished when I saw her. She complained of severe pain, and was very pale and anemic. On examination I found the vagina completely closed by a fleshy band about one-eighth of an inch in thickness, with an opening in the center of about a quarter of a dollar in size. By entering my finger in this opening I found the os uteri dilated about the size of half a dollar. The woman was in pain, but had no regular labor pain. At this time I asked my matron whether she had not examined the patient before my coming home and done something, and she replied that she had examined her, and found the os uteri opened only the size of a quarter of a dollar, and no labor pain. This convinced me that she only found the opening in the band. I sent at once for one of my assistants, who put the patient to bed and administered chloroform, when I applied the short forceps. It was no easy matter to adjust them, for the simple reason that the openings in the band and the os uteri were not sufficiently dilated to admit of the application of forceps, and I had the misfortune of having them slip twice; the third time I was successful enough, so that I could make traction. The hemorrhage was considerable during that part of the labor from the tearing of the band. Luckily, the os was not rigid, and there was no tear in the uterus. After considerable traction I delivered the fetus, and, against all expectations, alive. The placenta was slightly adherent, and had to be taken, soon after the child was born, for there was considerable hemorrhage, and I wished to administer ergot to the patient. After the removal of the placenta, we administered a dram of ergot, and the patient was syringed with carbolic acid water, as it was always our custom to do; as the hemorrhge continued we had to administer another dram of ergot. I left the patient, then, in charge of my matron, but was summoned in about five minutes, with the information that my patient had

passed a large clot of blood. I therefore administered another dram of ergot, finding the patient otherwise comfortable. She had wholly recovered from the effects of the chloroform. I left her again, but was summoned again in about ten minutes, the patient having fainted. I then injected, hypodermatically, two drams of ether, one dram into each arm, to which the patient very nicely responded, and there was no further trouble.

The perineum was torn to about the middle, and was repaired on the following morning, as it was late that evening before we got through, the pr procedure having taken about five hours. The child, which weighed about ten pounds, was healthy and in every way normal, except a sharp ridge over the right temporal bone, which was about three inches long, and which led me to the conclusion that there must be some deformity of the pelvis. The child and mother are living and well. I saw them about a year ago.

Before this patient left, and after her confinement, she told me that her mother died in confinement with her, and that the doctors in her town, when she was about to be confined, advised her to go to St. Louis to a lying-in institute, fearing that she would have trouble.

The literature of this subject can be found in the writings of the following text books: F. H. Getchell Encyclopedia of Obstetrics, page 154; Barnes' System of Obstetrics, page 375; Playfair's System of Midwifery, page 362, and Lusk's Science and Art of Midwifery, page 536.

No. 639 South Spring street.

CONGENITAL ANIRIDIA.*

BY A. L. MACLEISH, M. A., M. D., C. M., EDIN., LOS ANGELES, CAL.
EXTRAORDINARY MEMBER, LATE PRESIDENT ROYAL
MEDICAL SOCIETY OF EDINBURGH.

S., a Chinaman, aged 26, presented himself at my hospital in Amoy, South China, on May 31, 1885, for the cure of cataract of six years' standing. He stated that at birth a peculiarity of his eyes had been noticed; but that the condition had never caused him much inconvenience,—his sight, though not very good, having been serviceable enough for his work as a farmer till six years ago, when it began to grow dim. He was not aware of any deformity of the eye existing in his parents, or in any other member of his family.

The remarkable nature of his case was evident, even from a distance of several yards. His attitude was peculiar: instead of looking straight forward, he kept the head well flexed on the chest, and peered out from beneath the brows, though without elevating the eyeballs much. There was no photophobia. The iris was found to be completely absent in both eyes, and both lenses to be opaque, of a milk-and-water tint, with numerous small white spots, situated mostly in the capsules. The opacity was more pronounced in the *left* eye, where the cataract was very large, occupying most of the visible area behind the cornea; save that a narrow crescentic band, of about 1.5 mm. in breadth, appeared at the lower border of the lens, passing behind the margin of the sclerotic. Examined from above, this presented the appearance of a faint, smooth, gray, delicately-mottled membrane, without striation or visible fibrillation. Towards the periphery it faded from view, and the mottling ceased. It was at first judged to be a rudimentary segment of the iris, till it was discovered that, though no reflex from the fundus could be obtained through it, yet sufficient light passed to enable him to distinguish in an indefinite way the forms of objects which were held well above the

*Extract from a paper read before the Los Angeles County Medical Association, Feb. 1, 1895.

eye: thus he could tell whether the hand, at a distance of eighteen inches, was open or closed, and whether the fingers were still or moving, close together or apart. The membrane alluded to was also situated at a deeper plane than that which the iris would have occupied, lying about as far back as the equator of the lens, to the capsule of which it was organically attached; traced downwards, as it passed out of sight behind the sclerotic, it still preserved apparently the same plane.

In the *right* eye the cataract was found to occupy the upper three-fifths of the corneal area, presenting a definite rounded lower border crossing the field. At the sides and above it was lost behind the sclerotic, and towards these margins gradually diminished in opacity. There was thus between the lower border of the lens and the corneal margin, when the eye was examined axially, a clear crescentic area of fully 3 mm. in breadth, through which a certain amount of useful vision was obtained—necessarily imperfect, however, as there was extreme hypermetropia, and no power of accommodation. Examined from above this clear area seemed much broader, passing down behind the sclerotic without apparent limit. The appearance was highly suggestive of dislocation upwards of a lens of the same diameter as the cornea, but there was no history of injury. In fact this clear area, though so much broader, corresponded exactly to the membranous crescent in the left eye; it was, however, quite pellucid, and no membrane could be seen in it, even with the most careful focal illumination. Through this area the disc could be distinctly seen with the naked eye in ordinary daylight, appearing considerably magnified. With the aid of the ophthalmoscope (direct method,) a strong convex lens being used behind the mirror, the fundus was found, so far as it could be examined, to be perfectly normal. The choroidal vessels were nowhere visible. Still the anterior moiety of the fundus in this eye seemed paler than it usually is in Chinese, and the retinal vessels seemed to disappear sooner from view in tracing them from behind forwards; though I should not be inclined to lay much stress on this point, so oblique examination with the mirror being open to fallacy. By focal illumination from above, the patient's eye being directed downwards, and the surgeon's assisted by a strong convex lens, the fundus could be distinctly seen to pass quite forward to the cornea, without the interposition of ciliary processes, or iris, or of any rudimentary structure that might represent either organ. At the other parts of the periphery, the opaque lens extended too widely in the corneal area for any trustworthy observation to be made as to this point.

There was considerable lateral nystagmus accompanying visual effort, and varying in its direction according to the direction in which the eyes were turned. When the eye made no muscular effort, the nystagmus subsided. Both lenses vibrated slightly with the movements of the eyes, the vibration in the left being as free as in the right. The corneae were of normal size, shape and prominence; they were mottled in parts with small nebulous areas, the result of occasional ulceration, with which the right eye had been the more frequently affected. Neither cornea exhibited the so-called "foetal ring," but the extreme periphery of the left cornea, in a zone of about 1 mm. in breadth, though quite pellucid, was occupied by a narrow close-set fringe of minute superficial blood-vessels. The aqueous chambers appeared to be of normal depth. In each eye the tension was subnormal.

Both lenses were markedly increased in size. In the right eye, where the ectopia was pronounced, the estimate formed of the size of the lens was that, if brought down into a central position, it would have completely occupied

the lumen of the bulb. In the left eye the same was the case, though here the lower border was in much the same position as that which a lens of normal size would have occupied. In both the curvature of the visible portion of the lens-equator was as nearly as possible the same as that of the corneal margin.

There being still useful vision in the right eye, the cataract on the left side, which was judged to be soft, was operated on under cocaine. The capsule having been needled freely, the diffluent lens-substance escaped into the anterior chamber, from which it was forthwith removed by the use of the broad needle and curette. A little flocculent material was left behind, with, as it happened for once, no possibility of its exciting iritis. The eye was then bandaged, no atropine nor other application being employed. The next day the aqueous was found completely restored, and the tension the same as before operation. Three days later a little of the opaque matter was observed entangled in the capsule, lying deeply on the vitreous, which was not in the least bulged forward; the rest was floating loosely in the anterior chamber. In the course of a few days this was all absorbed. The capsule remaining filmy was subsequently lacerated with two needles, at a point corresponding as nearly as possible to the middle of the clear area below the lens of the opposite side. With the exception of the usual amount of conjunctival injection, and a transient hyperaemia of the vascular fringe on the cornea, no signs of irritation were observed after either operation.

Part of the crescentic film beneath the capsule proper was lacerated in the second operation, and retracted quite after the manner of lacerated capsule. There being now a free opening through which the fundus could be illuminated, the use of the mirror showed the remainder of the film to be translucent, the red reflex being perceived through it, much as through the capsule itself: the line of its junction with the capsule proper was a trifle more dense. To the sides and above the filmy spotted capsule still obscured the view of the inner aspect of the corneo-scleral junction; but a careful scrutiny of the extreme anterior limit of the lower one-fourth of the fundus, which was clearly visible, failed now, as in the right eye, to detect either iris or ciliary processes, or any rudimentary indications of these organs.

The fundus exhibited no abnormality, but the eye was more than usually hypermetropic after removal of the lens, a glass of 14 D. being required for distant vision. A general view of the fundus could be obtained simply by looking obliquely into the patient's eye, as he stood facing a window, the disc standing out sharp and distinct, and considerably magnified. The acuteness of vision was materially enhanced by the interposition of a diaphragm between the spectacle lens and the eye, with a small opening opposite that in the capsule. Unfortunately, I had at that time no method of accurately expressing the acuteness of vision in illiterate Chinese. With the use of lens and diaphragm he could, at a distance of fifteen yards, distinguish each brick in a wall; but on account of the nystagmus which attended conscious muscular effort, he could not fix the eye sufficiently to count more than three bricks in series correctly. He expressed himself as much gratified with the result of the operation, and quite able again to earn his living.

Eleven months after the operation, I had again an opportunity of examining the patient, and carefully verified all the points in the above description. Vision in the left eye was in the same condition as above stated. The only changes that could be observed in the eyes were, that the right lens was more opaque, and that the vascular fringe on the left cornea had disappeared, leaving a faint peripheral nebula.

The accompanying Plate depicts the appearance of the lens in the corneal area before operation; the view of each eye is axial.

I have collated from periodical literature thirty-six detailed notices of the occurrence of Congenital Aniridia. In some of these the shape of the lens is anomalous, and in some the size abnormally small; but I have been unable to find a single case, besides my own, in which the lens presented a distinct increase in size. Ectopia lentis occurs in twelve of the thirty-six cases, and in most of these the eccentricity was pronounced. It is a fact of outstanding interest, and one to which any theory of the aetiology of aniridia must give due prominence, that in every recorded case of this complication, the displacement of the lens has invariably been away from the locality in which true coloboma of the iris occurs, and towards the region in which in partial aniridia the rudiment of the iris is almost always situated,—to wit, upwards. Superadded to this upward displacement, I find in two cases, Reute's* and Harlan's,** a displacement forwards, the elevated lens being situated immediately behind the cornea. The complication is not necessarily congenital. Thus in three of Debenedetti's cases*** disturbance of vision did not appear till between the fifteenth and twenty-fifth years of life; and Hirschberg,**** who traced a case step by step, from the tenth month onwards, found the lenses central at ten months and two and a half years, but displaced upwards at five years. At five and a half years, in this case, the displacement had increased till the lower border of the lens lay behind the middle of the horizontal diameter of the cornea, while, owing to diminution in the size of the lens, only its upper border impinged on the upper border of the cornea. At ten years of age, the lenses occupied the upper third of the background of the cornea, and their form had altered, becoming a transverse spindle-shape. The course of the affection in this case is thus somewhat suggestive of a slowly progressive contraction, possibly of a cicatricial character, involving the inner tunics of the upper part of the globe. With regard to my own case, the patient's statement as to the previously serviceable condition of his sight, combined with Hirschberg's observations, warrant the supposition that the progressive impairment from his twentieth year onwards may have been due, not only to advancing opacity, but also to an advancing ectopia of the lenses.

Cataract is found with such frequency in cases of aniridia, as almost to constitute an essential feature of the condition; so much so, indeed, that the earlier oculists recognized in it a remedial effort of nature, for the exclusion of the too abundant supply of light from the eye, and on this ground advised against an operation for the removal of the cataract.* That it is not the case, as is** sometimes stated, that the opacities of the lens in aniridia are usually stationary, the previous history of our patient, as well as the observations of Hirschberg and others on their cases sufficiently prove. In our case, at the time of observation, the cataract presented a pretty uniform diffuse bluish-white opacity, broken only by the denser white capsular opacities. This was the case over the whole of the left lens, which at the operation was found to be diffluent. The right, more markedly eccentric lens, however, presented towards the sides and above, where it disappeared behind the

* Reute.—Lehrb. d. Ophthalm., 2 Aufl. 1854, p. 633.—Ref. from Manz.

** Harlan.—Boston Med. and Surg. Journal, 1882, p. 368.

*** Debenedetti.—Ann. di Ottal., Pavia, 1886, xv. p. 399.—Ref. from Nagel.

**** Hirschberg —Centralblatt f. praktische Augenheilk. 1888, xii, p. 13.

* Gescheidt.—Graefe and Walters Journal, Bd. xxii, 3, p. 410.

** Berry, Diseases of the Eye, 1889, p. 148.

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sclerotic, a gradual but distinct diminution of opacity. In this respect it was comparable to the markedly ectopic lenses in Klein's case,** which, with a striated opacity in the lower half, in the upper half were pellucid, quite to the line where they met the wall of the bulb. This would seem to indicate that the apparatus for the nutrition of the lens was at least less defective above than below, in Klein's case and my own; and, if we accept the view of Von Arlt, that this nutrition is dependent for the most part on the rich venous plexus of the ciliary processes, would at once raise the question whether these organs were not really present, in a more or less rudimentary form, in the upper segment of the globe—a region shut out from direct examination by the abnormal invasion of the lens.

Immediately beneath the lens of the left side in our case, there was found a crescentic membrane of quite a peculiar character, which has already been briefly described. Its situation, its transparency, (as evinced both by the test of vision and by illumination after the second operation,) and the manner of its retraction when lacerated, alike negatived the supposition that it was a rudimentary margin of iris tissue. In forming an opinion as to its probable nature, one can only be guided by analogy. I would suggest two alternative views.—(a.) The left lens in our case appeared to be of the same size as the corneal base, but to have been withdrawn upwards, though to a less extent than the right. It is thus possible that the membranous crescent in question may have been a persistent unabsorbed peripheral portion of the membrana capsulo-pupillaris, originally lying on the anterior surface of the lens-border, from which no iris-growth had ever come to separate it, but left behind by the lens on its withdrawal upwards, so as eventually to appear just beyond its equator.* (b.) It may have been part of the suspensory ligament, slightly discolored and thickened.**

Notwithstanding the frequent occurrence of cataract in aniridia, examples of successful operation for its removal are of rare occurrence. Marz of Freiburg, indeed,*** warns operators to be cautious in dealing with eyes affected with congenital malformations, as he had failed in both an aniridic father and son, on whom he had operated for cataract, loss of vitreous leading to shrinking of the globe. A similar result is recorded in several other cases. The only successful operations which I can find on record are by Nicolini, von Arlt (two cases, father and son,) Rittmann and Streatfield. In our case, the complete absence of irritation after the operation, and the uninterrupted and rapid progress to a successful result, seem to confirm the observations as to the structural relations of the parts. I would suggest that the needle and curette operation is especially indicated in all cases, and should be employed irrespective of the opinion that may be formed as to the density of the lens.

129 South Spring street.

We are in receipt of an interesting little brochure on "Surgery 200 Years Ago," sent to us by the Antikamnia Company of St. Louis. It contains some very interesting reading on the surgery of the past and the medicine of today. The illustrations "take de cake," and will certainly attract attention anywhere.

** Klein.—Zehender, Klin. Monatsbl. f. Augenh., xv. 1877, p. 25.

* Cf. Da Gama Pinto and Hirschberg regarding an eye with coloboma and persistent pupillary membrane, in Archiv fur Augenheilk., xiii. 1. p. 81, and Nagels Jahresb. xiv. p. 267.

** Contrast the appearance of the suspensory ligament in Brunhuber's case of hydrophthalmos with atr ophy of iris and ciliary processes, [partial in one eye, total in the other, which thus simulated aniridia,] in Zehender, Klin. Monatsbl., xv. 1877, pp. 104-116.

*** Marz.—Zehender, Klin. Monatsbl., xiii. 1875, p. 35.

SELECTED.

DEPARTMENT OF SURGERY.

UNDER THE CHARGE OF JOS. KURTZ, M.D., PROFESSOR OF CLINICAL SURGERY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA, AND CARL KURTZ, M.D.

POSITION OF THE PATIENT IN EXCISION OF TUMORS OF THE RECTUM.—Mr. Godler, in British Medical Journal, reported the following: A week ago I removed a tumor of the rectum, about 1½ by 1 inch, or rather larger, situated so high up the bowel that it was impossible without enlarging the anus to estimate either its exact size or position. Instead of placing the patient in the lithotomy position, I turned him on his face, close to the side of the table; the right thigh was extended, the left flexed, hanging over the side of the table, and the knee resting on a chair. The ease with which the operation was performed, as compared with the difficulties which are experienced when the patient is in the lithotomy position, prompts me to ask you to insert this note, because, as far as I know, the latter is the most common, if not the invariable one used, at present. The operation consisted in making a mesial incision as far as the level of the third foramen of the sacrum, removing the coccyx, and separating the attachment of the sacro-sciatic ligaments as far as the third foramen on the left side. The rectum was then slit up from behind, and the growth pulled down and removed with scissors. An opening of considerable size was made in the peritoneum, but as this could be perfectly well seen it was stitched up with the greatest ease. All bleeding vessels could be at once picked up without difficulty, and all the steps of the operation could be accomplished with much greater precision than I have ever found possible in the lithotomy position. Those who have not adopted this plan will, I am sure, find it worthy of a trial.

SHOCK TREATED BY INFUSIONS OF NORMAL SALINE SOLUTION.—Mr. Mayo Robson described several cases in which he found the infusion of several pints of normal solution (6 per cent.) of salt into the circulation ward off impending death in cases of intense shock after operation. The cases specially described were one of enucleation of a large fibrema of the uterus, and another of amputation at the hip-joint in a young adult, for sarcoma of the upper part of the thigh. In neither case had there been any material loss of blood, but death was apparently imminent from shock. Both patients were saved by the means adopted. After quoting from several authorities to show the similarity in the symptoms of syncope and collapse, Mr. Robson pointed out that it had been clearly shown that shock was naturally due to paralysis of the heart and vasomotor paralysis of the abdominal vessels, the sudden dilation of which might simulate sudden hemorrhage. He said in cases of shock without serious hemorrhage the blood was driven into the large abdominal veins, where, for the time being, it was useless, leaving the head and extremities in a state of anaemia. If by injecting several pints of blood-fluid into the vessels the blood could be forced into circulation again, the effect should be at once manifest by filling of the vessels in the head and extremities, and although the blood would be diluted, the increased quantity, three to four pints, would be sufficient to fill the dilated and partially-paralyzed abdominal vessels, as well as the vessels supplying the parts essential to life. The heart, moreover, would be likely to be stimulated by the blood being driven into it. The cases he had related seemed to bear out these suggestions. His own con-

viction, from personal experience, was so distinct that it had become his practice, whenever he went to perform a capital operation, to include among his instuments a transfusion apparatus and a "package of salt, sufficient to make four pints of normal saline solution.—*British Medical Journal.*

TREATMENT OF FRACTURES OF THE CRANIAL VAULT.—A suspected simple fracture should be exposed by an incision of the scalp for the purpose of examination. If a simple linear fracture be discovered, and there be no symptoms pointing to a complication, the wound may be closed. If with a linear fracture there be indications of meningeal hemorrhage, or of lesion of the brain-substance, or if there be an open fissure, trephination should be made for further exploration. If the fracture be depressed, the bone should be elevated, even in the absence of complicating symptoms. The further incision of the dura, or invasion of the brain itself, concerns the management of complications, and not the fracture *per se*, and is, consequently, foreign to our purpose. This series of rules, which I regard as aphorisms, are founded upon a belief in the necessity for the elevation of depressed bone under all circumstances—a necessity so urgent as to demand that the depression should be determined or disproved by any requisite operative means. It has fortunately been possible to institute these operative measures without danger to the patient. The validity of the proposition that depressed bone should always be at once discovered and elevated or removed would seem to have been made convincingly clear in the history of numberless cases in which it has been neglected. It is not an occasional, but a frequent instance, in which, after a lapse of years, epilepsy, abscess, or mania has followed a cranial fracture, and in which a simple depression unrelieved, a cyst, or a spiculum of bone penetrating the brain, has been found to be the cause of an irremediable disease. If the occurrence of immediate danger is to limit responsibility, the surgeon may allow his patient to drift, while he watches from day to day for the manifestation of primary symptoms, and in their absence for some brief time regard the cure complete. It is not even possible in a majority of cases to repair the evil consequences of such neglect by later operations; the remedy lies in the prevention, not in the cure. The epileptic habit, or the maniacal condition once firmly established, the final removal of its cause is too often but an ineffectual resort. If we consider, then, the serious morbid conditions which often follow a neglect to relieve the brain from bone-pressure, and the absence of probable danger, which it involves, there seems to be no good reason why fracture of the vault should not be subjected to as critical an examination as other accessible injuries.—*Dr. Phelps*, in New York Med. Journal.

DEPARTMENT OF MEDICINE.

UNDER THE CHARGE OF DRS. F. D. AND ROSE T. BULLARD.

NEW METHOD FOR TREATMENT OF PULMONARY TUBERCULOSIS.—By Dr. G. M. Carasso, Genoa, Italy. (Pacific Med. Jour., February, 1895.) In the year 1888 I began the first experiments, subjecting my patients to the constant inhalations of the essence of peppermint, and administering to them internally a solution of creosote, while hyper-alimentation was at the same time maintained.

Instructions for Applying the Method.—A simple little piece of cloth, one decimeter wide, folded several times on itself, so as to form a cushion, five centimeters long by two wide, is fastened under the nostrils by two bands sewed to the ends and tied over the sinciput or over the ears. Sprinkle the cushion with four or five drops of the essence every three or four hours, and keep it constantly in position day and night. Close the mouth and take through the nose deep inspirations, holding the air impregnated with mint the longest time possible in contact with the bacilli in the alveoli and pulmonary cavities. After six or seven deep inspirations rest for a quarter of an hour, then repeat, thus alternating the deep and ordinary inspirations. As the cushion may become displaced at night, it is necessary to sprinkle the pillow with fifteen or twenty drops of the essence. When the malady is not very far advanced, so that the individual can pursue his occupation out of doors, I have found a very practical inhaler made with a goose quill containing a piece of cotton and a little roll of cloth saturated with mint, and held between the lips as a cigarette or toothpick. In the house the cushion is always preferable.

Creosote Solution.—Pure beechwood creosote, gm. 8; alcohol, gm. 550; pure glycerine, gm. 250; chloroform, gm. 20; essence of mint, gm. 8. Shake well and give a tablespoonful in a half-glass of sweetened water every three hours during the day. Give at frequent intervals, milk to the degree of tolerance, several eggs, roast meat, and a generous supply of wine, especially marsala, as much as from 300 to 400 grams a day.

In such manner I have caused the bacilli to disappear in from ten to sixty days. At the same time, the cough diminishes in frequency, the quantity of sputa diminishes, and slowly changes from purulent to sero-mucous, the troublesome and exhaustive sweats disappear, and nutrition improves with increase of weight, often considerable. The normal resonance percussion is re-established later, and the vesicular murmur at last returns.

Do not dismiss the patient before the total disappearance of the rales and the return of the vesicular murmur, inasmuch as the bacilli will first disappear from the sputa. It is well to continue the treatment for at least a month after the disappearance of every morbid symptom, limiting the patient to the ordinary inspirations and not the deep ones. For the first few days anoint the nares with vaseline to protect the skin from the irritant action of the mint. At the beginning, the deep inspirations will produce some annoyance, but this will soon pass away. If solution seems too concentrated, it can be diluted with water. The patient can indulge in mild recreation as the case may allow.

Forty-three cases of pulmonary tuberculosis had given me thirty-seven recoveries when I made my method public, and from its use I draw the following conclusions:

1. The bacilli of Koch constantly disappear from the expectoration.

2. All the sick in whom the tubercular process is confined to the lung recover perfectly; and actually many recoveries occur at a remote period of five or six years.

3. This method, simple and effective, is absolutely harmless.

VALUE OF COMBINING HEART TONICS.—(The Clinical Journal.) Convallaria Majalis is a simple cardiac tonic and safe remedy, in action similar to digitalis, but not so marked; it causes slowing and increases the force of the heart beats. But it will frequently be found in lessening compensation, that convallaria, strophanthus and digitalis individually fail or disappoint after a time; and that a combination of all three often pro-

duces an effect little short of marvelous. Once or twice in recent years I have been called in consultation over cases of advanced mitral disease, in which central failure had shown itself by extensive dropsy of the limbs, edema of the lungs and liver, and on inquiry as to the exhibition of digitalis, the reply has been, "He has had it," with perhaps a like response as to strophanthus and convallaria. But they had not been given collectively; and when this was done, benefit speedily accrued to the patient, and credit to his medical advisers.

SUGGESTIONS IN THE MANAGEMENT OF THE COMMON DISEASES OF CHILDREN.—(Charlotte Medical Journal.) Dr. J. H. Tilden gives some valuable suggestions. Teething, improper and overfeeding, bad ventilation, thermal changes, overworked and overworried mothers and septic infections are given as the causes of sickness in childen under two years. Teething is not as important a factor as it has long been regarded.

Children under one year should not have anything but milk or the better class of infant foods. In bottle-fed children, the imperfect asepsis in the care of the bottles is the cause of much trouble. Bottles should be cleaned immediately after nursing and then boiled and put out in the sun. Children under six months are not to be fed oftener than every three hours; over six months and under twelve, every four hours. If not satisfied, give water, but let it be warm and out of the bottle just the same as food. A constant desire for more nourishment generally means gastric irritation, and instead of giving more food, the regular amount should be cut down and water substituted. Cow's milk is the next best food to mother's milk; it should be sterilized and kept in tight glass jars. If you are sure of the quality of the milk, and limit the quantity to the digestive capacity of the child, the "thick, tough curd," so much talked about, will cause no trouble. Children should wear light flannel, even in hot weather; they should sleep by themselves, because they get purer air than when sleeping with grown people. Overworked and overworried mothers, when they are nursing babies, are the cause of much sickness.

Nearly all diseases of young children, except the contagious fevers, are on the order of cholera infantum, ranging from slight indigestion to the severe forms. In such a trouble keep the child quiet on the bed. If it is being nursed, treat the mother. Get her in the best physical condition possible, then her milk will be at its best. Room quiet and well ventilated. No nourishment of any kind to be given for from twelve to twenty-four hours, depending on severity. If great thirst, give of essence of pepsin one-half ounce to four ounces of water, a teaspoonful every hour, alternating with bichloride of mercury, gr. 1-16, to four ounces of water, a teaspoonful every hour. Give it all the hot water it can take from a bottle with two grains to one ounce of salt added. After the fasting period, begin with one-fourth the usual amount of food, at the same regular intervals as before. If there is nausea, stop food again, also water by mouth, but give by enema. Sponging will relieve thirst. For pain in bowels, wash out with large enema, quart of hot water with teaspoonful of salt added. The pepsin digests all of the food in the stomach, the bichloride overcoming and preventing decomposition, and thus meeting all of the indications for the rational use of medicine. Sponge or tub baths will reduce the fever and allay the nervous irritability produced by the fermentation. Other means are seldom necessary.

OBSTETRICS AND GYNECOLOGY.

UNDER THE CHARGE OF WALTER LINDLEY, M.D., ASSOCIATE PROFESSOR OF GYNECOLOGY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA.

LEPROUS INTERCOURSE.—In Appleton's new system of genito-urinary diseases, syphilology and dermatology, Dr. Morrow says: "The contagiousness of leprosy is fully sustained by the immense mass of positive clinical testimony." He does not believe that heredity can be regarded as a prominent factor in the propagation of the disease. He thinks that most observers err in assuming that there is one exclusive mode of infection, and he now believes that sexual intercourse plays a very inappreciable role in conveying the germs of leprosy, although formerly he attached considerable significance to this mode of contagion.

TRENDELENBURG.—At a recent meeting of the Los Angeles County Medical Society, Dr. C. C. Fowler, the well-known surgeon, gave a very forcible warning against the use of the Trendelenburg position in celiotomies, where there was pus in the pelvic or abdominal cavities.

Dr. Hermann J. Boldt, in Lippincott's new clinical Gynecology, says: "Dr. H. C. Coe states that the Trendelenburg posture is likely to lead to secondary hemorrhage, owing to the sudden change brought about in the pelvic circulation when the patient is lowered to a horizontal position. I have as yet not met with such a complication; and it can, I believe, be prevented by the employment of a table which can be lowered very gradually. An ordinary wooden chair has been frequently used by me, and is admirably adapted for the purpose. The two hind legs are cut off up to the cross-bar, the chair is secured to the table, and the improvised structure is covered with blankets; or a sufficiently high box is made use of; a board is fastened to it on the table, and all is covered." Dr. Boldt concludes by saying: "No complicated operation should be undertaken in the small pelvis without making use of the aid derived from this posture.

OCCIPITO-POSTERIOR POSITIONS.—Van Peyma (Buffalo Medical and Surgical Journal), in writing of Occipito Posterior presentations, says: "If circumstances are otherwise normal we shall do well to leave the case to nature, so long as fetal-heart sounds are strong and regular and the condition of mother is good. If, however, the labor is unduly prolonged or the condition of fetus or mother, or both, is poor, then the indication is fulfilled by effecting and maintaining more pronounced flexion.. If, by means of the finger tips, flexion is not accomplished, or if, having been obtained, partial extension reoccurs; or if with complete flexion there is no advance, then more active interference is demanded. The patient should be completely anesthetized, the whole hand introduced, and partial rotation of the occiput effected, following which the forceps may be applied advantageously, less for the purpose of immediate traction than to maintain the position of the head. Except in cases demanding rapid extraction, podalic version cannot compete with the procedure described. The application of the forceps without previous rotation and with tips to forehead, should be limited to those case, where the head is so deeply and firmly engaged that rectification is impossible or dangerous.

IMMEDIATE REPAIR OF UTERINE INJURY AFTER LABOR.—A. Palmer Dudley, in the American Journal of Obstetrics, concludes an article on this subject as follows:

1. Suturing the lacerated cervix properly immediately after delivery will result in primary union and prevent many of the evils that follow in the wake of union by second intention.

2. The fear of septicemia attending the manipulation of the cervix for the same, and the introduction of poisons, which will induce septicemia at the same time, is an unfounded one, and would be dissipated by giving such work a proper test. .....

3. It is a method of procedure more justifiable than an immediate repair of the perineum, the latter of which the profession today universally advocates.

4. That the securing of primary restoration of the laceration hastens involution, prevents subinvolution and the various forms of displacement which are induced by it in such an overweighted organ.

5. Catgut is the proper suture, and perfectly safe and reliable when properly prepared. .....

THE KRASKE METHOD.—Dr. Joseph P. Bacon (American Journal of Obstetrics), in speaking of the "sacral method," consisting of the removal of the the coccyx and the two lower sacral vertebra, says it should be adopted:

1. When the uterus is too large to be removed through the vagina and the tumor is impacted in the pelvis.

2. When cancer of the body of the uterus would infect the peritoneum if removed by any other method.

3. When the carcinoma involves the vagina and uterus and sacral glands.

4. Pelvic dermoids or inflammatory deposits that have suppurated and opened into bladder and vagina or rectum.

5. Large tumors of the prostate.

6. Large paravesical tumors.

7. Malignant growths of the uterus, involving the rectum.

8. Pelvic deformities, especially osteo-malacia.

Dr. Nicholas Senn, in discussing the Kraske method, said he had resected the rectum by means of this sacral method fifteen times, but that its value had been overestimated.

Dr. Henry T. Byford said: "The sacral method of operation should be almost universally disregarded in the treatment of cancer of the uterus, for it is more dangerous than vaginal hysterectomy, and when the disease has extended beyond the uterus the patient is certain to die in a few months."

Dr. L. L. McArthur said: Kraske resected the rectum and united it by sutures, leaving the sphincters intact.

EYE, EAR, NOSE AND THROAT.

UNDER THE DIRECTION OF W. D. BABCOCK, A.M., M.D., PROFESSOR OF DISEASES OF THE NOSE AND THROAT, COLLEGE OF MEDICINE OF THE UNIVERSITY OF SOUTHERN CALIFORNIA.

RIPENING OF IMMATURE CATARACT.—Bettman (Annals of Oph. and Otol., January, 1895,) again advocates the artificial ripening of immature cataracts, summing up as follows: (1) Artificial ripening of cataracts is in properly selected cases demanded. (2) Direct trituration is preferable to other methods; it is easily performed by one possessing ordinary skill. (3) It is not followed by any untoward symptoms, consequently, it is a safe and re-

liable procedure. (4) It is not indicated where sclerosis involves the bulk of the lens. (5) It is especially useful in senile cataract with soft cortex. (6) The results of massage are marked and rapid. (7) The maturity of the cataract is usually induced in three weeks, often sooner. (8) Very little discomfort is caused the patient aside from bandaging the eye two days. (9) At the subsequent extraction of the lens, the cortical substance is readily removed, and dangers of iritis and suppuration of the corneal wound are lessened.

TRAUMATIC CATARACT—TREATMENT.—Ball (Annals Oph. and Otol., January, 1895.) In cases of traumatic cataract with rapid swelling of the lens, an operation should be performed; and that operation should be, not linear extraction, as has been the rule heretofore, but an extraction made with the Graefe knife, the incision being located in the corneo-scleral junction. The knife should cut from one-third to two-fifths of the corneal circumference, according to the extent to which the softening process in the lens has advanced. * * * * The extent of the incision of the cornea is of little importance, provided we make an aseptic operation. This cut avoids a valve and permits free evacuation of the lens substance with least amount of traumatism. An iridectomy is not made. All the debris is removed at once.

HALO OR RAINBOW SYMPTOM IN GLAUCOMA.—Willetts (Annals Oph. and Otol., January, 1895.) in a theoretical paper on this subject says: "The character of the symptom is described in text-books principally as a rainbow or ring of colored light when the visual axes are directed towards a lamp or bright light; not constant, appearing and disappearing during the course of the disease. Recapitulates as follows: (1) There is no transposition of colors in the rainbow. (2) If the play of colors were due to the non-eliminated excretions of the blood, we should have the symptom in other diseases of the eye in which tension is not a factor. (3) If it were due to deposits of urea on the retinae, at some time deposits should be discernible with the ophthalmoscope, which they are not. (4) It is in my opinion dependent on stasis and edema of the cornea, the varying distinctions of said symptom dependent on the varying stages of edema. (5) Its appearance in comparatively low tension is dependent on the non-absorption of the resulting edema of the cornea from a previously high tension. (6) Its disappearance or non-disappearance in enormously high tension is dependent on the naturally increased edema, causing a coalescence of the edematous beads of water under the epithelial layer, thus destroying the proper relation for refraction, without which the colors cannot be produced. (7) Intra-ocular contents must be excluded as a causative factor.

UNIVERSAL PRESCRIPTION.—Every doctor should read it and have his family read it, and then their friends, and when it is worn out he should buy another copy, and every now and then for his patient write out an order

1 "Stories of a Country Doctor" (King).

M. Sig. One story three times a day just before meals.

As a result his patient's digestion will be improved. A demand for food will soon be established, assimiliation will be hastened, and all will go as merry as a marriage bell with that patient.—*Medical Mirror.*

CORRESPONDENCE.

LICENTIATES OF THE CALIFORNIA STATE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners of the Medical Society of the State of California, held February 5, 1895, the following certificates were granted:

ALSTON, HUGH, 3971, Oakland, Royal College Surgery England, November 10, 1892; Lic. Royal College Phys. London, Oct. 27, 1892; Univ. of Brussels, Belgium, Dec. 14, 1892.
BEARD, T. E., 3972, Petaluma, Rush Medical College, Illinois, Feb. 16. 1886.
BOGUE, HERBERT E., 3973, Santa Paula, Rush Medical College, Illinois, Feb. 16, 1886.
BREED LORENA M., 9974, Perris, N. W. Univ. Woman's Medical School, Illinois, March 30, 1893.
CRAIG WILLIAM H., 3975, Freedom, Pa., College Phys. and Surg., Baltimore, Md.,, March 5, '86.
DICKSON, J. F., 3676, Portland. Or., University Toronto, Canada, June 8, 1880.
FRARY, LOREIL ALLISTON 3977, Ontario, Rush Medical College, Illinois, Feb. 15, 1887.
GRISSIM, JOHN D., 3978, San Jose, College Phys. and Surg., New York, June 44, 1893.
KINNEY, AUG. C., 3979, Oakland, Bellevue Hospital Medical College, New York, May 1, 1870.
LA GRANGE, O. D., 3980, Riverside, Rush Medical College, Illinois, Feb. 20, 1883.
LEAHY, B. J., 3981; San Francisco, Queen's University, Ontario, Canada, April 23, 1894.
LORD, FRED. K., 3982, ort Wine, Louisville Medical College, Ky., March 6, 1894.
MACDONALD, GEORGE, 3983, Santa Barbara, Royal College Phys. and Surg., Edinburgh, Scot. November 2, 1891.
MARTYN, JOHN H., 3984, Fort Bidwell, Missouri Medical College, Mo., March 6, 1890.
POWELL, BART. J, 3985, Sacramento, Jefferson Medical College, Pennsylvania, May 9, 1804.

FEBRUARY 5TH, 1895.

ROSS, ALBERT, 3986, Fallbrook, Medical College of Indiana, March 30, 1892.
STO DARD, CHARLES H., 3987, Colton, College Phys, and Surg., Chicago, Ill., March 29, 1892.
TYLER, HOELL, 3938, Highland, Dartmouth Medical College, N. H., November 16, 1880.

MEDICAL DEPARTMENT, UNIVERSITY OF CALIFORNIA, NOV. 20 1895.

FREEMAN, CHARLES H., 3989, Auburn.
PAWLIEKI, C. F. 3990, San Francisco.

COO ER MEDICAL COLLEGE, CAL.

BOIDO, LORENZO, 3891 San Francisco, Dec. 7, 1893.
BROWNING, C. L., 3992, Woodland, December 6, 1894.
CHALMERS, GEORGE F., 3993, Niles, December 6, 1894.
KECK, F. C., 3994, San Francisco, December 6, 1894.
LEECH, CLAUDE R., 3995, Oakland, December 6, 1894.
MADDUX, J. E, 3966, San Francisco, December 6, 1894.
MCGOWAN, EDWARD J., 3997, San Francisco, November 6 1894.
MEDROS, JOSEPH J., 3998, Oakland, December 6, 1894.
NEWTON, FRANKLIN C., 3999, Colusa, December 6, 1894.
SEVENMAN, GEORGE W., 4000, San Francisco, December 6, 1894.

CHAS. C. WADSWORTH, M. D., Secretary.

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Communications are invited from physicians everywhere; especially from physicians of the Pacific Coast, and more especially from physicians of Southern California and Arizona.

EDITORIAL.

MEDICAL DEGREES.

We are glad to see that the American physician is beginning to assert his rights. Dr. W. S. Thorne of San Francisco, in several articles in the Pacific Medical Journal, has brought this matter very forcible and clear before the profession, and we give it our hearty support. In the February number of the same journal a Dr. C. Fitzgerald Buckley attempts to criticise Dr. Thorne in a most ungentlemanly manner, in an article headed, "Stump Oratory or Medicine." While we cannot see by what right he can name Thorne's patriotic assertions "stump oratory," we certainly see in Buckley's article a very slum oratory style. There can be no fair-minded foreign physician who does not agree with the views expressed by Thorne. But, unfortunately, there are more Buckleys in this country ready to jump at the medical practitioner who has no other credentials than a diploma of an American school. It seems to us that a qualified European physician, who is hospitably received here, and who is accorded the same rights as is possessed by his American colleague on presentation of his diploma, without any further examination, should, like the American, practice in accordance with the rules of the code of ethics accepted by the profession. But a glance at the daily newspapers or at the office windows convinces us at once that many of the European physicians ignore that document entirely. They imagine they are privileged to do what the American is not permitted to

do, nor what they would do in their own home, namely, to advertise in a perfect quackery style, in large letters, long columns in newspapers and over many windows what they have been and what they can do, trying to impress the reader with their great superiority over others. Here in Los Angeles we find many samples of the kind, men who have received their license by the State board on the recommendation of physicians who strictly adhere to the rules of the code of ethics. Is such conduct not sufficient to prejudice the American against the constant invasion of foreign physicians? As far as we know there is no country in the civilized world which allows any physician to practice without undergoing an examination; why should it be unjust for America to examine the foreigner?

We hope to see the day yet that not only foreigners, but all physicians who apply for a license in the State of California, shall be examined by a board of examiners.

EDITORIAL NOTES.

The twenty-fifth annual meeting of the California State Medical Society will take place April 16th, 17th and 18th, at San Francisco. As this is the silver anniversary of the organization of the society, it is to be hoped there will be a goodly attendance. It is especially important that a full delegation attend from the southern counties, as it is about time to invite the State society south again, and to accomplish this desirable end it may be necessary for the one-lunged constituency to hump itself and do active missionary work. Los Angeles ought to be well represented, as she has about three hundred practitioners. Quite a number of these are recent arrivals; to them we would say that the door of the State socity is through the local organization. All live physicians ought to belong to the home society; those who expect to do a large amount of work will find it to their advantage to become a member of the State association. All the old members, all desiring to become members, all hoping to be such when they have lived the required probation in California, are cordially invited to attend this silver wedding of medicine and society at San Francisco next month.

We notice tht the well-known firm of Parke, Davis & Co. are soon to put on the market diphtheria anti-toxine. The marked success of this remedy when used early in the disease will make it one of the essentials in medicine; and we are pleased to have so reliable a firm undertake its manufacture on a large scale. Thus far it has been impossible to supply the demand, and as it takes time and the utmost care to prepare the remedy, it is fortunate that so large a firm has concluded o manufacture it.

The American Academy of Medicine will hold its twentieth annual meeting at Johns Hopkins' University, Baltimore, Saturday, May 4th, and Monday, May 6th, 1895. The headquarters of the Fellows of the Academy will be at the Stafford. A score or more interesting papers have been promised. From a perusal of the titles we think that the duties of the physician in relation to the public are to be thoroughly discussed.

H. W. Yemans, M.D., of San Francisco, who has been filling the position of Acting Assistant Surgeon, United States Marine Hospital Service, has resigned and taken offices at No. 711 Taylor street, San Francisco.

William R. Warner & Co. have recently published a neat little "Therapeutic Reference Book." Any of our subscribers can have the same by sending 15 cents to that firm in Philadelphia. This small amount is to defray the expense of sending—the book being really a gift to the profession.

The annual meeting of the American Medical Publishers' Association will be held in Baltimore, on May 6th, in the parlors of the Eutaw House, at 9:30 a.m. An interesting programme has been prepared, and it is to be hoped that the Pacific Coast will be well represented at the meeting.

Dr. L. Zabala starts this week for Europe, where he will spend a year in study. He will first devote a few weeks to the hospitals of Chicago and New York, and will then proceed to Paris, where he took his degree. The doctor expects to return to Los Angeles.

PAMPHLETS RECEIVED.

THE MODERN AND HUMANE TREATMENT OF THE MORPHINE DISEASE. By J. B. Mattison, M.D., Medical Director, Brooklyn Home for Habitues. Read before the Pan-American Medical Congress, Washington, D, C., September 6th, 1893. Reprint from Medical Record, Dec. 23, 1893.

MORPHINISM IN MEDICAL MEN. Read before the Medical Association, San Francisco, June 6th, 1894. By J. B. Mattison, M.D., Brooklyn, N. Y. Reprint from the Journal American Medical Association.

THE INFLUENCE OF DISEASES OF THE NOSE AND NASO-PHARYNX ON OTHER PARTS OF THE BODY. By W. Scheppegrell, A.M., M.D., Assistant Surgeon to Eye, Ear, Nose, and Throat, Hospital, etc., New Orleans, La. Reprinted from the August, 1894, number of the New Orleans Medical and Surgical Journal.

UTERINE FIBROIDS. By Charles P. Noble, M.D., Surgeon-in-Charge of the Kensington Hospital for Women, Philadelphia. Reprinted from the Medical and Surgical Reporter, June 2, 1894.

SYMPHYSEOTOMY, VERSUS, THE INDUCTION OF PREMATURE LABOR. By the same author as the above. Reprinted from the Transactions of the American Gynecological Society, May, 1894.

CEREBRAL LOCALIZATION. WHAT IS KNOWN, WHAT IS SURMISED, AND WHAT IS ITS SURGICAL VALUE. By J. W. Robertson, M.D., Professor Nervous and Mental Diseases, University of California, San Francisco. Reprinted from the Journal of the American Medical Association, August 4, 1894.

ANNOUNCEMENT OF THE WOMAN'S MEDICAL COLLEGE OF CINCINNATI, OHIO, 262 W. Eighth St., 1894-'95.

BLOODLESS VAGINAL MYOMECTOMY. By Oscar J. Mayer, M.D., San Francisco, Cal. Reprinted from The Journal of the American Medical Association, July 21, 1884.

MASSAGE IN GYNECOLOGY. By Oscar J. Mayer, M.D., from the same Journal as above, Aug. 11, 1894.

VAGINAL FIXATION IN THE TREATMENT OF RETRO-DISPLACEMENT OF THE UTERUS. By Clinton Cushing, M.D., San Francisco, Cal., Professor of Gynecology in Cooper Medical College.

SOME UNUSUAL CASES OF ABDOMINAL SURGERY WITH COMMENTS. By the same author as the above.

COLLEGE OF DENTISTRY OF THE UNIVERSITY OF CALIFORNIA. Thirteenth Session, 1894-'95. 18 Taylor St., San Francisco.

TREATMENT OF HYDROPHOBIA. By Charles W. Dulles, M.D. Reprinted from the Therapeutic Gazette, July 16, 1894.

KENTUCKY SCHOOL OF MEDICINE AND HOSPITAL, in the City of Louisville. Register of Students, 1894. Circular of Information, 1895. Thirty-ninth Annual Session.

SO-CALLED SPONTANEOUS COMBUSTION OR INCREASED COMBUSTIBILITY OF THE HUMAN BODY. WITH EXPERIMENTS.—By Adrian Hava, M.D. New Orleans, La. Reprinted from April, 1894, New Orleans Medical and Surgical Journal.

STOMATITIS NEUROTICA CHRONICA. By A. Jacobi, M.D., Clinical Professor in College of Physicians and Surgeons, Columbia College, New York. Reprinted from the Transactions of the Association of American Physicians, 1864.

THE PRODUCTION OF DISEASES BY SEWER AIR. By the same author as above. From New York Medical Journal for July 28th and August 4, 1894.

WHY CHRONIC URETHRITIS IS ORDINARILY DIFFICULT OF CURE AND AN EFFICACIOUS METHOD OF CURING IT. By Bransford Lewis, M.D., of St. Louis, Mo. Reprinted from the Tri-State Medical Journal.

RUSH MEDICAL COLLEGE, CHICAGO, MEDICAL DEPARTMENT OF LAKE FOREST UNIVERSITY. Fifty-second Annual Announcement, 1894-'95

A RESUME OF TWELVE HUNDRED EXAMINATIONS FOR LIFE-INSURANCE. By William H. Dukeman, of Los Angeles, Cal. From The Medical News, September 8, 1893.

A CONTRIBUTION TO THE HISTORY OF MEDICINE IN SOUTHERN CALIFORNIA. By Cephas L. Bard, M.D., Ventura, Cal.

BOOK REVIEWS.

SURGICAL PATHOLOGY AND THERAPEUTICS. By JOHN COLLINS WARREN, M.D., Professor of Surgery in Harvard University; Surgeon to the Massachusetts General Hospital. Illustrated. Philadelphia, W. B. Saunders, 925, Walnut St. 1895. $6, cloth.

The style is clear and interesting, the teaching modern. It is complete. The many original illustrations and the drawings of microscopical sections are fine. Mr. William J. Kaule is the artist.

The first chapter is devoted to Bacteriology in a general way—gives definitions, varieties, shape, form, arrangement, mobility, manner of multiplication, etc., of bacteria. Methods of staining are described. A few paragraphs are given to the description of culture media, their preparation and sterilization, and manner of inoculation. Chapter II. Surgical Bacteria. A clear and elegant description of the various staphylococci and streptococci met with in surgical diseases, bacillus coli communis, gonococcus, bacillus tetani, tubercle bacillus, B. mallei, leprosy, malignant oedema, anthrax-actinomyces. Attention is called to the role of importance that the bacillus coli communis plays in the production of suppurative processes in the peritoneal cavity. "Richardson found pure cultures in fulminating appendicitis with perforation of the appendix." No mention is made of Turro's method of cultivating gonococci. Suppuration of tubes and ovaries, are due largely to gonococci; Councilman and others have shown that the gonococci may be sole organism in metastatic inflammation of joints and endocardium, and not other pyogenic organisms.

Warning is given to the careless practitioner that under certain conditions the baccillus tuberculos is maynot be stained by the quick methods, he advised the Koch-Ehrlich method. The chapter on simple inflammation, infective inflammation, repair, gangrene, shock, fever, surgical fever, septicemia, pyemia, erysipelas, hospital gangrene, tetanus, hydrophobia, actinomycosis, anthrax, glanders, snake bite, are as full as one could wish. The frequent description of clinical cases is a valuable addition to these chapters. In the surgical fevers, a very interesting description of surgical scarlet fever is given. One hundred and twenty-eight pages are given up to Tuberculosis and diseases of bones, and 150 to tumors. The tumors are described minutely from pathological standpoint. Treatment is clearly outlined. This is probably the most

interesting chapter in the book. Summing up the treatment of carcinoma and sarcoma by the toxines of the streptococcus erysipelatus and bacillus prodigiosus, he says: "There is little doubt that it is of little value in treatment of carcinoma;" in regard to sarcoma thinks "it is desirable to experiment further in that direction."

In the chapter on Aseptic and Antiseptic Surgery, there is the usual description of preparation of patient, dressings, instruments, cat gut or silk, hands etc. Stress is laid on the fact that the mechanical removal of dirt by a sterilized brush and soap is the most important feature of asepsis. Especial care should be paid to nails. Soaps made by the cold process contain micro-organisms. Advises use of sapo viridis. After this use either the German or Welch method for cleansing hands. Peroxide of hydrogen will remove stain of Permanganate of potash from nails. In accidental wounds, four indications for treatment: 1. Removal of visible dust by forceps and boiled water. 2. Microscopical dirt by flushings of boiled water and antiseptic solutions. 3. Prevention of subsequent infection. 4. Immobilization of part. Do not hurriedly cleanse wound. In the appendix, blood serum therapy in rabies; antitoxine of tetanust, treatment of cancer according to Willy Meyer, Coley's erysipelas toxine; methods of examining tumors, parasites of cancer, and decalcifying Bone are described.

This book should be owned by every surgeon and student of medicine.

AN ILLUSTRATED DICTIONARY OF MEDICINE, BIOLOGY AND ALLIED SCIENCES, By GEORGE M. GOULD, A.M., M.D., author of "A New Medical Dictionary," "12,000 Medical Words Pronounced and Defined," "The Meaning and the Method of Life;" Editor of "The Medical News;" President, 1893–94, American Academy of Medicine; one of the Ophthalmologists of the Philadelphia Hospital; including Pronunciation, Accentuation, Derivation, and Definition of the terms used in Medicine, Surgery, Anatomy, Physiology, Therapeutics, Materia Medica, Dietetics, Pathology, Ophthalmology, Otology, Laryngology, Obstetrics, Dermatology, Pediatrics, Legal Medicine, Psychology, Climatology. Histology, Neurology, Toxicology, etc. etc., and the various Sciences closely related to Medicine, Dentistry, Pharmacy, Chemistry, Hygiene, Zoology, Botany, Electricity, Bacteriology, Parasitology, Microscopy, Veterinary Medicine, etc. etc., based upon recent Scientific Literature. P. Blakiston, Son & Co., publishers, 1012 Walnut street, Philadelphia. Half Dark Green Leather, $10.00; regular Medical Sheep, $10,00; Half Russia Thumb Index, $12.00.

It is rare that a reviewer has the pleasing task of examining so excellent a work as Gould's Dictionary. It is abreast with the medical literature of the day. He who has it will not find it wanting when he wishes to learn what some new word means. The reviewer well remembers the disgust which he frequently experienced on failing to find a desired word in the Dictionary. The everlasting bane is now done away with for the happy possessor of Gould. The objects of this work can be enumerated thus: 1. The inclusion of many thousands of new words which have been introduced into medicine the past few years. 2. A compact epitomization of the words of the older authorities. 3. Inclusion of biological terms. 4. Encyclopædiac character—giving pronunciation, derivation, definition, logical relations and bearings and practical importance. 5. Extensive tables on bacteriology, arteries, muscles, nerves, tests microscopical technique, etc. 6. Progressive spelling. 7. Plain, common sense English pronunciation.

These last two steps are especially worthy of commendation, the discarding as fast as possible the orthographic abominations of our mother tongue, and the simple straight forward pronunciation of English as she is spoke, are fundamental principies in this work. Then the reader will find hemorrhage, fetus, etc.,

spelled with a single "e" instead of the diphthong. It is Bronchitis and not Bronchetis, and so on.

This is by far the largest and most most complete single volume dictionary in our language. Foster's four volume encyclopedic dictionary contains 3091 pages, containing more matter to the page. Keating has 868 pages with less matter to the page. Gould comes half way between with 1633 pages. But the matter is well selected, modern, covering the entire range of medicine and allied sciences. As the new standard dictionary meets the want of the general public for a practical working yet complete dictionary, so will Gould be to the medical profession a handy working companion. Foster will be the great work in medical lexicography for many a year, but Gould will be the practical text book for the profession.

It is well and intelligently illustrated with figures put in for actual elucidation rather than ornamentation. The type is clear, the arrangement pleasing, and the binding of such a nature that the work will stay open at any desired place.

A CLINICAL MANUAL OF DISEASES OF THE EYE, INCLUDING A SKETCH OF ITS ANATOMY. By D. B. St. John, Roosa, M.D., LL.D., Professor of the Diseases of the Eye and Ear in the New York Post-Graduate Medical School and Hospital; Surgeon to the Manhattan Eye and Ear Hospital; formerly Professor of Diseases of the Eye in the University of the City of New York, and in the University of Vermont; Consulting Surgeon to the Brooklyn Eye and Ear Hospital; President of the New York Academy of Medicine; Honorary Member of the Medico-Chirurgical Society of Edinburgh; Honorary Fellow of the Academy of Medicine of Havana, Cuba, etc. Octavo, 650 pages, 178 engravings in the text, nearly all original, two full page chromo-lithographic plates, and a full-page black plate. Bound in extra muslin at $5.50, and in sheep at $6.50.

The object of this work to present in a permanent and accessible form the author's views on ophthalmic disease and therapeutics. While this work cannot have the weight that his book upon the ear has, where Roosa is an unquestioned authority, yet as it embodies the experience of a keen observer and one who has had a wide clinical field, the profession can not fail to appreciate it. The book is divided into four parts—first a sketch of the anatomy and physiology of the various parts of the eye and its appendages, second, the relative frequency of different diseases of the eye, methods of examination, therapeutics and surgery of the eye, third, diseases of the eyelids, the lachrymal apparatus, the conjunctiva, eyeball and orbit, fourth, conditions of the eye requiring glasses, errors of refraction and accomodation, strabismus, affections of the ocular muscles.

In some respects he differs markedly from most of the modern authorities. Latent insufficiencies are regarded as quite mythical, he rejects altogether asthenopia dependent upon insufficiency of the external ocular muscles, and regards muscular asthenopia as dependent upon errors of refraction chiefly upon astigmatism.

It is however a well written book, it takes up many subjects connected with eye troubles and handles, then with skill and in an interesting style. The last chapter is of special importance as showing the relation between neurology and ophthalmology. The work concludes with 24 pages in a glossary of ophthalmological terms and it gives in a nutshell the meanings of the thousand and one technical terms of this the most technical branch of medicine. It is this and the excellent anatomical and physiological descriptions which make this so good as a text book. "The whole makeup of the work shows the teacher"—and that is a great merit in any book of instruction.

A MANUAL OF MODERN SURGERY. GENERAL AND OPERATIVE. By JOHN CHALMUS DACOSTA, M.D., Demonstrator of Surgery, Jefferson Medical College, Philadelphia; chief Assistant Surgeon, Jefferson Medical College, etc., with 188 illustrations in the text and 13 full page plates in colors and tints, aggregating 276 figures. Philadelphia. W. B. Saunders, 925 Walnut Street. 1894. Price $2 50.

This book essays to sail between the Scylla of a concentrated compend and the Charybdis of the cumbrous text book—the obsolete and unessentials making room for the modern methods, hypothetical theories are lightly passed over to give place to practical surgery. Like all modern surgeries it discusses bacteriology at length for this is the hand maiden of the new surgery—naturally such topics as inflammation repair and surgical fevers, terminations of inflammations, ulcerations, gangrene, thrombosis and septicaemia and pyaemia are then considered somewhat at length, these subjects occupying 130 pages. Erysipelas, tetanus, rickets, tuberculosis and syphilis each have chapters devoted to their consideration. After a general survey of contusions, wounds, tumors, and morbid growths the chief feature of the work is the more or less extensive discussion on the diseases and injuries peculiar to the different parts and systems of the body. Orthopedic surgery is handled under diseases of bones and joints. Bandages, amputations and asepsis form materials for other chapters. In looking over the book one can hardly fail to find most any topic mentioned, and by a judicious silence as to non-essentials whatever is discussed is handled in such a manner as to give a definite idea. We think this work preferable to a compend, and for the purpose written will probably give the student more in an assimilable form than many of the larger volumes.

"DIGESTION AND DIET," BY SIR WILLIAM ROBERTS.

The appearance of this little work almost marked an era in the field of physiological chemistry, and at once stamped its author as an authority on all subjects pertaining to human food.

In speaking of starch, he says: "The importance of starch as an article of human food has perhaps scarcely been duly recognized. If we regard the enormous proportions in which the seeds of cereals and leguminous plants and the tuber of the potato enter into our dietary, and the immense percentage of starch in these articles, it is probably not too much to say that fully two-thirds of the food of mankind consists of starch."

It is deplorable, but a fact nevertheless, that intestinal or pancreatic indigestion is rapidly increasing, and starch must be omitted from the dietary of a patient so afflicted, for, notwithstanding its importance as a food, if it is not digested it rapidly ferments, and is consequently worse than no food at all.

No observing physician needs to be told the immediate results of any interference with the starch-digesting functions of the pancreas. Rapid loss of weight and strength are but the precursors of more serious troubles.

It is in cases of this character that an artificially-digested starch food like Paskola proves of the greatest value, for not only does it present this most important element of the human diet in a form ready for immediate assimilation, but it aids the digestion of other foods.

The uses of such a preparation are legion, and Paskola is destined to fill an important place in the newer *materia medica*. A supply of the product will be gladly sent, express prepaid, to any physician who may wish to test it in his practice.

Reprinted from the Daily Lancet.

MONTHLY METEOROLOGICAL SUMMARY.

U. S. WEATHER BUREAU, LOS ANGELES STATION.

Los Angeles, California. *Month of February, 1895.*

Date	TEMPERATURE Max.	Min.	Mean	Precipitation in inches and hundredths
1	70	42	56	0
2	65	39	52	0
3	71	44	58	0
4	74	43	58	0
5	63	36	50	0
6	58	41	50	0
7	58	36	47	0
8	52	44	48	0
9	59	47	53	.13
10	58	47	52	T
11	56	47	52	.03
12	57	50	54	.24
13	65	43	54	0
14	69	43	56	0
15	69	42	56	0
16	68	48	58	0
17	76	49	62	0
18	82	51	66	0
19	80	52	66	0
20	72	53	62	0
21	73	46	60	0
22	72	52	62	0
23	68	45	56	0
24	62	51	56	.01
25	64	46	55	0
26	74	45	60	0
27	84	50	67	0
28	83	50	66	0
29				
30				
31				

SUMMARY

MONTHLY RANGE OF BAROMETER:

Mean Barometer, 30.08.
Highest barometer, 30.43, date 16.
Lowest barometer, 29.89, date 9.
Mean Temperature, 57°.
Highest temperature 84°, date 27.
Lowest temperature 36°, date 5.
Greatest daily range of temperature 34°, date 27.
Least daily range of temperature 7°, date 12.

MEAN TEMPERATURE FOR THIS MONTH IN

1877		1883	52°	1889		56°
1878	55°	1884	56°	1890		54°
1879	56°	1885	57°	1891		52°
1880	51°	1886	60°	1892		54°
1881	59°	1887	51°	1893		55°
1882	51°	1888	54°	1894		51°
				1895		57°

Mean temperature for this month for 16 years, 55°
Total deficiency in temp. during the month, 55°
Total deficiency in temp. since Jan. 1. 22°
Prevailing direction of wind, Northeast.
Total movement of wind, 2280 miles.
Maximum velocity of wind, direction, and date, 19m, N.W., 13th.
Total Precipitation, .46 inches.
Number of days on which .01 inch or more of precipitation fell, 5.

TOTAL PRECIPITATION FOR THIS MONTH IN

1878	7.68	1884	13.37	1890	1.36
1879	.97	1885	T	1891	8.56
1880	1.56	1886	1.41	1892	3.19
1881	.36	1887	9.25	1893	2.27
1882	2.66	1888	.80	1894	.49
1883	3.47	1889	.92	1895	.46

Average precip'n for this month for 16 years, 3.37.
Total excess in precip'n during month 2.91.
Total precip'n from Sept. 1,'94, to date, 11.67 inch.
Averge precip'n from Sept. 1,'94, to date, .. inch.
Total deficiency from Sept. 1,'94, to date, 1.57 in.
Average rainfall for 10 wet seasons, 22.58 inches.
Number of clear days, 13.
" partly cloudy days, 9.
" cloudy days, 6.

NOTE—Barometer reduced to sea level. "T" indicates trace of precipitation.

METEOROLOGICAL SUMMARY SOUTHERN CAL., FEBRUARY, 1895.

STATIONS	TEMPERATURE Mean	Max.	Min.	Mean Barometer	Relative Humidity	RAINFALL Days	Am't	WEATHER Clear	Fair	Cld'y	WIND Direc-tion	Total Mov't
Los Angeles	57.	84.	36	30.08	69.	5	.46	13	9	6	NE	2,280
San Diego	56.	82.	37.	30.06	74.	5	.53	15	7	6	W	3,360
Santa Barbara	55.8	79.5	37.5		74.	3	.67	16	6	6	W	2,517
Yuma	61.	84.	38.	30.03	37.	1	.02	20	7	1	N	5,052

OBSERVERS.—George E. Franklin, U. S. Weather Bureau, Los Angeles; M. L. Hearne, U. S. Weather Bureau, San Diego; Hugh D. Vail, Santa Barbara; A. Ashenberger, U. S. Weather Bureau, Yuma.

REGISTERED MORTALITY OF LOS ANGELES.

WITH SEX AND NATIVITY OF DECEDENTS.

Estimated Population, 75,000. *February, 1895.*

CAUSE OF DEATH	Total Deaths	Annual rate per 1000	SEX		NATIVITY				RACE		
			Male	Female	Los Angeles	Pacific Coast	Atlantic States	Foreign Born	Caucasian	African	Mongol
Deaths from all causes	81	12.96	52	29	13	11	33	24	74	4	3
Deaths under 5 years											
i. Specific infectious diseases	15		5	10	1	4	7	3	15	2	
ii. Diseases of digestive system	9		6	3	2		5	2	7		2
iii. Diseases of respiratory system	22		16	6	4	2	6	10	20		
iv. Diseases of nervous system	5		4	1	1		3	1	5		
v. Diseases of circulatory system, blood and ductless glands	8		6	2		1	3	4	8		
vi. Diseases of genito-urinary org'ns	2		1	1	1		1		2		
vii. Constitutional diseases	4		1	3		1	1	2	4		
viii. Intoxication, violence, accidents	10		10		2	1	5	2	8	1	1
ix. Miscellaneous diseases	6		3	3	2	2	2		5	1	
i. Septicæmia	1			1		1			1		
Pyæmia											
Diphtheria	2			2	1		1		2		
Erysipelas											
Typhus fever											
Typhoid fever	2		1	1		1		1	2		
Malarial fever											
Scarlet fever											
Measles											
Cerebro-spinal meningitis	1		1			1			1		
Smallpox											
Tuberculosis	9		3	6		1	6	2	9		
Influenza											
Dysentery											
Syphilis											
Tetanus											
ii. Diseases of the œsophagus											
Gastritis											
Gastro-enteritis											
Cholera infantum											
Enteritis	4		3	1	2		2		3	1	
Appendicitis											
Intestinal obstruction											
Diseases of liver	4		3	1			2	2	3	1	
Peritonitis	1			1			1			1	
iii. Membranous croup	2		1	1	2				2		
Bronchitis	3		3					3	2		1
Pneumonitis	1		1				1		1		
Pleuritis	1			1	1				1		
Phthisis	15		11	4	1	2	5	7	14		1
iv. Diseases of brain	5		4	1	1		3	1	5		
Diseases of spinal cord											
Eclampsia											
Epilepsy											
v. Diseases of heart	7		5	2		1	2	4	7		
Degeneration of arteries	1		1				1		1		
Aneurism											
Anaemia											
vi. Uraemia											
Acute Bright's disease											
Chronic Bright's disease	1			1			1		1		
Diseases of genital-organs	1		1		1				1		
vii. Rheumatism	3		1	2		1	1	1	3		
Gout											
Diabetes	1			1				1	1		
Inanition											
Senility and Asthenia											
viii. Alcoholism											
Opium habit											
Suicide	3		3		1		2		3		
Violence and accidents	7		7		1	1	3	2	5	1	1
ix. Tumors—malignant	2		2				2		2		
Tumors—non-malignant											
Other diseases	4		1	3	2	2			3	1	

F. W. STEDDOM, M D., Health Officer.

OUR ADVERTISERS.

DISEASES OF THE FEMALE GENERATIVE ORGANS.

In conversation with a physician not long since, who has been a wide traveler; he asked the question, "Why is it that almost every woman in America that the physician has to examine for one cause or another, we find suffering from some form of leucorrhoea? This is not the case with the women in England and on the continent of Europe." We were unable to reply satisfactorily to the question, but were forced to agree with him in regard to the vast number of American women who suffer from some form of this disgusting disease.

Not only do our women have leucorrhoea to an unprecedented extent, but they suffer from the many other forms of disease of the various parts of the sexual apparatus, more than women of other countries. How we are to account for this I cannot tell, but I am sure that these are facts.

It puzzles the busy doctor to meet the exigencies of such cases as these in a manner wholly satisfactory to himself and his patient, and I am induced to lay before my readers the results of my experience which have been so acceptable and which I do not think are known so fully as they should be, that is their treatment with the Wine of American Ash. As an internal remedy in all disorders of the uterus it is without a peer. By this I do not mean to be understood as making the extravagant assertion that it will cure all of this class of cases, but I do claim that it has a modifying influence upon all diseases of the female sexual organs, from the simplest vaginitis to the gravest case of cancer of the uterus; and if the trial is fairly given, in a scientific manner, the results will surprise and delight the doctor as well as the patient, and a much larger proportion of cases cured than would have seemed possible by any other method.

It was Dr. Charles P. Turner of Philadelphia who a number of years ago (the exact date I have forgotten) first called the attention of the medical profession to the value of Vinum Fraxini Americanae in the treatment of female diseases, and his articles were so painstakingly written, his cases so carefully collated and tabulated, that he at once commanded the attention that so important a subject demanded. His reports cover prolapsus, versions, the various classes of mechanical irregularities, dysmenorrhoea from non-mechanical causes, ovaritis, vaginal and uterine inflammation, leucorrhoea, vaginal and catarrhal, and all of that class of cases which depend upon the enlarged glands for their basis. It is well known that the uterus is composed essentially of erectile tissue, the arteries supplying it being in the form of a helix and placed in such a way, that a larger supply of blood can be rapidly furnished at the time the erection takes place. It is also a well-known fact that the periodical enlargement and contraction is going on all the time in health, in harmony with the physiological law of ovulation, while emotional or sexual impressions are minor causes of temporary distension.

Just before the menstrual period the size of the uterus from vascular engorgement is increased greatly, and if at this time the deliverance from hyperaemia be interfered with by any malign influence, such as cold, etc., the shock falls upon the vaso motor nerve system.

It is true likewise that paralysis of the vaso motor nerves arrests the circulation and the vascular engorgement remains, when the first stage of chronic enlargement with its subsequent pathological changes is set up.

Without going into etiological detail, we may state that the enlargement

being now a fixed factor, the element of mechanical pressure in its turn impairs the neurotic force essential to contract muscular fibre or stimulate the absorbent and capillary systems. It is at this point that Vinum Fraxini Americanae exerts its specific influence and extends its remedial action, exerting (unlike ergot) a gentle, persistent tonic impression upon the benumbed nervous system. The result is the disappearance of the neurasthenia, the absorbents wake up so to speak, and proceed to perform their functions properly, the tough adventitious tissue is removed and the uterus returns gradually to its normal size and condition. I have found in the class of cases enumerated above, if the treatment be carefully and conscientiously carried out, the effort will be crowned with success, in from six weeks to four months, while marked improvement is manifest in from one to three weeks. The dose should be one teaspoonful before each meal. If a careful trial is given we predict satisfactory results. The Wine of American Ash which I used was made by Theodore Metcalf Company, No. 39 Tremont street, Boston, Mass.

VISCERAL STEATOSIS.

In the summer of 1894, having a case of emphysema in a very corpulent subject, to whom I had been giving morphine and digitalis with some relief, I concluded to try the poke-berry and see if it reduced the amount of superabundant fat upon the pathological condition present. The following is a true report of the case:

In May, T. S. B., aged 48, a native, came and complained of the usual symptoms of emphysema and cardiac weakness. Treatment, morphine sulphate, gr. ⅛, three or four times a day. Result, some relief, but not satisfactory to patient, who still complained. His weight was at this time 236 pounds. In early July I put him on phytoline, 10 drops, half-hour before and one hour after meals. In three weeks he experienced much relief from the shortness of breath, and had lost in weight ten pounds. Then I weaned him away from the morphine and stopped the digitalis, but continued with the phytoline. In six weeks he had lost thirty pounds, and had no aggravation of the emphysematous symptoms; in fact, he said that he hardly had any trouble at all, and although his breathing was still a little short, the distress had entirely disappeared. In three months the weight was 180 pounds, and in October the phytoline was rapidly increased until a week later the remedy was entirely discontinued. His weight to date remains the same (180 pounds), and no recurrence of emphysematous or cardiac trouble has taken place.

Extact from an article by W. W. Baxter, M.D.

WEBSTER'S ADVICE TO WINTHROP.

Daniel Webster, the greatest man cradled on New England soil in any century, at the goal of his career, looking backward and remembering his own experience, thus advised Robert C. Winthrop, then at the very threshold of that public life which sheds such imperishable luster on his name.

"Winthrop, if I were as young as you are, and just beginning my Congressional career, I would adopt a different course from that which we are all pursuing in regard to speeches.

"I have lost my faith in long, labored efforts, to be printed a week after their delivery, and to be scattered over the country in pamphlets which nobody ever reads. I would speak short and often. I would take some part in every important discussion, and I would prepare every word which I pro-

posed to say, and write it out beforehand, so as to give a copy to the reporters the moment I sat down. In this way the next morning's paper would let my constituents and the country see and read what I had said."

Can this advice not be given with equal emphasis in relation to advertising? If the great orator makes one mighty effort on some stated occasion and then lapses into silence; he is lost in the swift tide of events the remainder of the time. Heard often, he is constantly in the public thought. So, if the merchant has one grand display and does nothing the rest of the year, or only appears in print occasionally, people forget and turn elsewhere the rest of the year. But let the daily columns proclaim his bargains in an attractive and novel manner, and the tide of trade to his counters is ceaseless in its flow. It is never permitted to ebb; is charged with constant success.

As Webster said to Winthrop, "Speak, speak," we say to business men, "Advertise, advertise." Be heard often in the right places and thousands of readers will become your daily audience, never forgetting when to trade.

ADVERTISE, IT PAYS.

It has helped make the "merchant princes" of our land, as oratory has proclaimed its foremost statesman.

PETTINGILL & CO.,
Newspaper Advertising Agency,
22 School street, Boston, Mass.
Mutual Reserve Building, New York City.

RUSSIA'S EMPRESS GAINS STRENGTH.

The producers of "Mariani Wine" (Vin Mariani) should, according to report, soon have a splendid market in Russia for their nerve and brain tonic, as the Dowager Empress has, at the suggestion of the Princess of Wales, drunk it since the death of her consort, with the most remarkable and beneficial results. It seems that Her Majesty is one of the many delicate persons with whom stimulating drugs like quinine, iron Peruvian bark disagree, but such is not the case with the wine tonic referred to. It is well known that the Princess of Wales also derived increased srength of brains and nerves from it during her last great trials. Moreover, in consequence of the benefits obtained by the Empress, a great demand fo this tonic has sprung up among ladies of Russian aristocracy suffering from "nerves."—*The Court Journal*, London, January 12, 1895.

There are many nutritive tonics on the market, but none are more palatable than Worden's Malto-Fer. The reason of this lies in the fact that the base is a superior wine, absolutely pure and not fortified. This disguises the bitter of cinchona, 15 grains to the ounce, quite completely. Malt 120 grains and ferric albuminate 2 grains are also found in each ounce. As this prepartion is neutral, non-styptic, stable and assimilable, it combines the better properties of iron without the usual disadvantages. We predict a good demand for this article, which it certainly deserves.

PROMPT AND CONVENIENT.—This is what is said of the new "Antikamnia, Quinine and Salol Tablets," each containing Antikamnia 2 gr. and Sulphate Quinine 2 gr. and Salol 1 gr. Because they are both prompt in action and convenient in administration, they please both the physician and the patient.

DR. CHAUNCEY STEWART OF ALLEGHENY CITY, PA., has used Iodia very extensively in his practice and regards it as the "ideal alterative—the *sine qua non* in the treatment of syphilis, scrofula, and all diseases arising from syphilitic contamination or a strumous diathesis. Iodia has this advantage over mercurial treatment in syphilis: when the patient does get well, he is well. He is not tortured with mercurial rheumatism nor made to blush through the syphilitic blossoming of his face in after years. He is well. Unlike the long-continued use of other alteratives, Iodia does not reduce and debilitate the constitution, but invigorates and restores the vital powers and enables the patient at all times to continue in the discharge of his vocation."

Some doctors are not chemists. Some doctors don't want to be, but they want to cure their patients just the same. Some doctors don't know the difference between a preparation and a product. A preparation of cod-liver oil contains all the irritating and nauseating elements of the oil as well as its medical properties. Cod-liver Glycerine is a product of cod-liver oil and contains only the active medical properties of the oil. That's what you want. That's what you get. You are looking for results. Cod-liver Glycerine gives results. It mixes readily with water and all medicines, and is the strongest tissue-builder known.

CYSTITIS AND METRITIS.

W. Warwick, M.D., King's Coll., Aberd., M.R.C.S. Eng., 1851, L.M. Roy. Coll. Belf., 1849., etc., Belfast, Ireland, says: "I have given *Sanmetto* a very good trial in cystitis and metritis, and the results have been most satisfactory. I do not know another remedy which I can rely on for such uniform good results in affections of the genito-urinary organs."

CELERINA.

There is no better remedy as a nerve tonic, stimulant and antispasmodic than Celerina, which has enjoyed such a large degree of popularity for a long time. Some of the most able and conscientious medical men in the country use it as a daily remedy, and no physician who has ever given it a fair trial will ever quit it.—*Med. Progress.*

PULMONARY TROUBLES.

After a practice of nearly thirty years and quite an extensive one in regard to pulmonary troubles, having used all of the emulsions, maltines, and different preparations that are recommended for said troubles, I find Terraline one of the most efficient and pleasant preparations that I have ever prescribed.

W. I. MOORE, M.D.

Clay, Ky., February 8, 1895.

FOR SALE.

One Amputating and Trepanning Case, and one Minor Operating Case, both practically new. None of the instruments in either of the cases have ever been used. A rare bargain. Address "Medicus," this office.

SOUTHERN CALIFORNIA PRACTITIONER.

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ORIGINAL.

*EMPYEMA OF THE ANTRUM OF HIGHMORE FROM A MEDICAL STANDPOINT.

BY W. D. BABCOCK, A.M., M.D., LOS ANGELES, CAL.

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Opening into the nose are several cavities, "the largest of which is the Antrum of Highmore, or the maxillary sinus; its shape is that of an irregular pyramid; its apex being towards the zygomatic process; its lateral walls are formed by the orbital cavities, and the lateral plates of the superior maxillary bones; its base or inner wall, which separates it from the nasal cavity, consists of portions of the superior maxillary, palate and inferior turbinated bones, and the unciform process of the ethmoid bone. It communicates with the nose by a round, or slit-shaped opening, the size of which varies very much. The opening lies at the level of the anterior end of the middle turbinated bone, in the middle meatus; there is often a second aperture of communication below the center of the middle turbinated bone. According to Reschreiter, the Antrum of Highmore in men always reaches a lower level than the nasal cavity; the lining membrane contains acinous and tubular glands, and serves partly as mucous membrane, partly as the matrix of a periosteum for the walls of the cavity." The size of the antrum varies from the size of the little finger to that of a hen's egg, extending over to the roof of the mouth.

It is only in the last few years that the troubles of the antrum have been to any extent looked into or called to our attention. I could find nowhere

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that Mackenzie, the father of laryngology, mentioned the antrum or its diseases in his last edition (1882) on the nose and throat. During a six-months' attendance in Vienna, Austria, in 1886, upon the throat clinics, I did not once hear the diseases of the antrum mentioned. I have talked to those who spent two winters there about the same time, and they report the same thing. Since 1886, or 1887, a number of rhinologists have written on the subject, so that we have now a good idea of its troubles, their complications and frequency.

The cause of empyema of the antrum is still in dispute, each faction looking for the cause from their own standpoint or prejudice. Most of the rhinologists in the last two or three years are of the opinion that the trouble begins in the nose, while the dentists think that diseased teeth and their complications are the main cause. I myself, at first, thought this last was the real cause, but now firmly believe that the trouble in the vast majority of cases begins in the nose. During a residence here of seven years I have had twelve or more cases, and while in all but one there were bad teeth, still, on close questioning, I found a former history of nasal trouble. In six cases I found decided nasal trouble. In one case, that of a doctor, there was a perfect set of teeth, so firmly set in the jaw that one dentist could not extract a tooth; his case, I think, was the result of an attack of acute catarrh. Zuckerkandle of Vienna, who has made more examinations of the nose on the dead subject than any one else, and whose work on the anatomy of the nose is classic, states that the most frequent cause is inflammation of the nasal cavity. A number of rhinologists agree with him, among whom are Krause of Berlin, and Bosworth of this country; the latter thinks the trouble does not come from the extension of acute inflammation of the nasal passage, but that the opening to the antrum is closed, causing first, hyperemia of the membrane lining the sinus; with this an increase of secretion, which, being confined, degenerates, becomes purulent, and we have empyema of the antrum. For many years, bad teeth were supposed to be the cause, and we have a number of good men still holding to this view; among the Germans, Fraenkel, Schmiegelow; of the English, Lennox Browne, McBride; Americans, Beverly Robinson and Garretson. That bad teeth may be the cause at times is true, but as for their being the most frequent cause I cannot admit. The first and second molar teeth usually project into the antrum, but there is nothing in it or its surroundings to cause decay. It seems normal, not pathological, for the teeth to so project, and where the conditions in the nose and antrum are normal, I can conceive no cause for pus to form or necrosis to take place. We do not often get the history of the attacks of acute catarrh, which caused the closing of the antrum; if we could, the cause would often be made clear, but we are nearing this point very fast. During the last epidemic of influenza, there have been a number of cases of acute suppuration in the antrum reported. One notable case is that of Felix Semon of London, the well-known rhinologist. I believe we will find that most of the chronic cases are the result of repeated attacks of acute nasal catarrh, which have caused a pathological condition of the nasal mucous membrane at or about the opening of the antrum. This may be either hypertrophy of the mucous membrane of the middle turbinated bone or it may be polyps or polypoid degeneration of the membrane. There are few cases of polyps in the nose where there is not antrum trouble. The nasal origin of empyema of the antrum has within the past few months been strongly contended for by Dr. Talbot of Chicago, Journal of the American Medical Association, No-

vember 24, 1894). In a paper read in San Francisco, June 5-8, 1894, Dr. Talbot says, "Difference of opinion exists as to the cause of empyema of the sinus. * * * With a view of obtaining some facts in regard to this matter, some years ago, I made a special examination of skulls, with the following results: Of the 6000 antra examined, there were 1274 abscessed molar teeth; of this number 76, or about 6 per cent., extended into and apparently discharged into the antrum. Septa were found in 963 cases. In the treatment of 384 cases of pulpless teeth in connection with the superior molars in the last twenty-four years, only four cases of abscessed antra were observed. Dr. M. H. Fletcher of Cincinnati, Ohio, examined 1000 antra, in which 252 upper molars had abscesses, making 25 per cent.; of the 252 cases, 12 perforated the antra. Dr. F. found in 224 cases of pulpless molars treated by him only one case of pus in the antrum. We must conclude, therefore, that the diseased antra are rarely due to abscessed teeth." Dr. Bonwill of Philadelphia, well known to all dentists, stated that he had had but three cases of antrum trouble that came from diseased teeth.

The pathological condition I am forced to give, as described by Bosworth, having done nothing in this condition personally. "At the outset of the affection, the mucous membrane is hyperemic, slightly swollen, and with its surface dotted over with minute points of ecchymosis, due to the fact that the blood vessels coursing through the membrane possess exceedingly thin, delicate walls, which rupture easily, giving rise to slight localized hemorrhages. As the disease progresses the membrane becomes swollen to ten or fifteen times its normal thickness, this swelling being largely due to an edematous condition. * * * This inflammation involves not only the superficial, but the deep layer of the membrane, which in this region constitutes the periosteum of the bony walls of the sinuses. In connection with this there is a somewhat profuse serous exudation, under which the blood-vessels unload themselves, and the swollen membrane to an extent subsides, followed by a more or less profuse secretion of sero-mucus, together with blood, and this in the course of time, occupying weeks or months perhaps, results finally in a discharge of pure laudable pus. The latter stages of the disease are characterized by a certain activity in the deep layers of the membrane or periosteum, under which are formed lamellae or spiculae of new bone, which may project into the cavity, or may form thin plates, crossing it in such a way as to divide it into two or more small chambers."

SYMPTOMS, SIGNS AND DIAGNOSIS.

In most cases I believe the trouble has been latent for a long time before either the physician or dentist is called upon for assistance. It may exist for years before it announces itself. Jeanty, in reporting twenty-two cases of latent empyema, states that they were slow, insidious; there existed neither pain nor swelling in the affected cheek, and the sole manifestation of the disease was a nasal secretion of continued or intermittent character, fetid or without odor, pus. The health of the patient becomes impaired if the disease has been of any great duration. They suffer from a mild degree of septicemia from the absorption of pus. The classical symptoms, such as distension of the antrum, swelling of the cheek, infra-orbital pain and escape of pus, lying on the sound side, are, as a rule, not present together. It is only during the epidemic of influenza of the last two or three years that I can find any clear reports of acute attacks of antrum troubles. It is by studying these cases that we can prepare ourselves to make an early diag-

nosis of this class of troubles. I believe many cases occur that do not report to physicians, or if they do, are not diagnosed. Felix Semon of London, the eminent laryngologist, reports, in the British Medical Journal, February 24, 1894, an acute case of his own antrum caused by influenza; there was considerable coryza, a watery discharge from both nostrils, followed by a sensation of fulness in the left cheek, increasing to a sense of intolerable distension of the zygomatic region. The skin over the part became distinctly swollen, reddened, and tender to the touch. Temperature 100.5 degrees Fahrenheit. There was no frontal neuralgia. After these symptoms had lasted twenty-four hours, a violent blowing of the nose brought away an ounce of turbid greenish sero-purulent fluid, followed by more of the same on lowering the head, inclined to the right. A few hours after, more of the same fluid escaped; later on a third escape took place; the acute complication now subsided, although two days later another discharge of greenish fluid of a mucoid character occurred, which signalized the end of the affection.

The points worthy of attention are, first, the sudden and violent increase in pain during sneezing or coughing; second, the limitation of pain to the affected region, and finally the tendency of influenza to single out the locality of its sequelae in different individuals. In Semon's case the sequelae observed, occurred in the domain of the fifth nerve; Lennox Browne and Moxham report acute cases with practically the same symptoms. Wolfenstein of Cleveland, in the New York Medical Journal, August 5, 1893, reports a case of acute empyema of the Antrum of Highmore, as follows: "The patient states that he caught a severe cold in his head two weeks ago, which ran an ordinary course, until within the past three days, when he noticed soreness of the teeth and pain in the cheek of the left side; at the same time there was a profuse discharge of pus from the left side of the nose; a feeling of soreness on this side of the nose also. The pain on the left side of the face was considerable, especially at night." "Kreig, in his account of acute cases, speaks of the great pain suddenly coming in the upper jaw, followed by swelling of the skin and a feeling of a weight in the antrum. Perforation gave great relief and a speedy cure. There were two relapses." There is in some cases great pain in the upper jaw; the teeth seem to be too large or shoved down out of their sockets, as it were. The pain shoots up into the ear, and at times takes on the nature of supra-orbital neuralgia. The supra-orbital pain is far more frequent than the infra-orbital. The patients complain of a nasty odor that is quite evident to themselves, but is not noticed by any one else; this odor is not constant, but in most cases can be observed by the patient drawing the mucus back and into the posterior nares. This is caused by their drawing the odor out of the antrum during this action. The odor can only be noticed in the morning by some, and by others in the evening. This depends, I think, upon the size and position of the opening in the antrum. Pus can be found in most of the cases coming out from behind the front of the middle turbinated bone. The flow of pus can be increased in many cases by holding the diseased side uppermost and the head forward and downwards. The pus at the anterior end of the middle turbinated bone pulsates at times. Zeim, in 1888, showed that blenorrhea of the nose rarely occurred without disease of the accessory cavities, and pointed out and proved that where this symptom occurs it is usually due to empyema of the antrum. We have headache complained of mostly in the frontal region, though in one case it was occipital, and passed away after operation. The opening into the antrum from the nose will, in most cases, be covered by polyps, or there will be

either polypoid degeneration or hypertrophy of the mucous membrane of the middle turbinated bone. Denuded bone about the opening can very often be felt with a probe. McBride calls attention to marked redness of the gum on the diseased side; this sign I have not met with. Pain on percussion will be found in many cases on the affected side and when the teeth are struck. There is likely to be a feeling of increased fulness and distension, with an increase of pain on affected side, headache, and sickness of the stomach towards evening. This is due to the erect position of the patient during the day, which does not allow a discharge of pus to take place, the antrum filling up full. Most of the cases are those, I think, where there is rather free drainage into the nose, and the symptoms or the trouble seem to be periodical. A case of this kind now on hand came to me for eye trouble; complained of neuralgia, pain worse in the evening, fulness not pronounced on right side of face, severe headache, pain over the eye; pain so great at times as to cause sick headache and vomiting. After close questioning, admitted a nasty odor noticed by herself only. Pus free in the morning, less so at night, when the pain comes on. Had an abscess of an eye-tooth some four years ago, wearing a rubber plate. In the nose, polypoid degeneration of the middle turbinated bone, pus flowing from behind the bone, which is pushed firmly over to the septum. "Berger calls attention to the frequent occurrence of polyps and hypertrophy, which closed the opening of the sinus. The secreted liquid was retained in the cavity, where it served for development of all kinds of bacteria, and particularly those which produced the mixture of trimethylamine, methylamine and dimethylamine, which one meets with in old red herring sauce, and the odor of which is identical with empyema." One of the means for diagnosis is the electric lamp in the mouth. In the healthy subject the pupil has a red reflex, and there is a bright, almond-shaped space under the eye. If these two are dark, there is a decided probability that there is trouble in the antrum. If with the dark pupil and dark space under the eye, we have pain above the eye, or whole side of the head is painful, and pus in the nose, we need not hesitate to make a diagnosis of pus in the antrum. The fact must not be overlooked that very often antrum troubles do not occur alone. They are in most cases associated with suppuration in the ethmoidal cells and sphenoidal and frontal sinuses. This condition must be thoroughly treated at the same time as that of the antrum. Some have claimed that there is a resistance to the finger on percussion, almost dulness over the affected cheek. I have tried for this, but have not convinced myself of its correctness.

Then, if we have a case with pus coming from one side of the nose, an odor that is only noticeable to the person himself, and this not at all times, the electric illumination showing a dark space under the eye, with these three points, or even with any two of them, we can safely make the diagnosis of pus in the antrum. If we are in doubt, the use of hydrogen peroxide, a few drops, thrown up behind the middle turbinated bone and into the antrum, will in most cases decide the question. If pus is in the antrum, there will be felt a commotion and a foaming, caused by the decomposition of pus, will be plainly seen under the middle turbinated bone. A small trocar and canula can for diagnosis be thrust into the antrum, either through the canine fossa or through the external wall of the nose, under the inferior turbinated bone.

The treatment of empyema of the antrum would seem to be simple and easy. We have a cavity filled with pus; all that needs to be done is to give

it good drainage, keep it clean, and it will get well itself. This is simple in theory, but in practice does not seem to work. If we could see the cases soon after their commencement, the theoretical treatment would be successful, but we do not see them in this stage. It is only long after the beginning that we see them, and then we have all the complications to combat. To prove that diseases of the antrum are troublesome to treat and to bring to a recovery, we need only refer to the great number of expedients and operations suggested and performed for its relief in the last three or four years. The subject has been written upon so much that one can say but little, if anything, that has not been said before.

The treatment is, of course, surgical; open the antrum; give good drainage. The best place for most cases to be opened is, as laid down by both Browne and Talbot of Chicago, and Fletcher of Cincinnati, (the point I had opened in the last cases I had had before I saw what these men had done), between the second bicuspid and first molar teeth and under the malar process. This place Talbot and Fletcher have demonstrated to be the point where in most every case the lowest part of the antrum can be reached. After the antrum is opened it must be washed out and kept clean. Almost any solution that is cleansing can, and has been used; the changes have been rung from warm salt water to a strong nitrate of silver solution. In one of my cases the man used his own urine. To treat cases successfully all the complications must be removed, such as polyps in the nose, enlarged middle turbinated bone, pus in the ethmoidal cells, and in the frontal sinus. These factors just mentioned, nose men are beginning to think are the cause of most of the empyema of the antrum. This subject was discussed in England in December, and the majority were of this opinion. If there is a diseased tooth or necrosed alveolar process, (these are the cases that dentists encounter), they must be removed. The dentists, as a rule, and a great number of rhinologists, open into the cavity through the socket of an extracted tooth; this is a good way in a number of cases, especially if there is no complication. If the case has been of any duration, there is likely to be polyps in the antrum or polypoid degeneration of the mucous membrane. If this happens the condition must be removed by vigorous curetting or scraping of the cavity. We have also bony septa growing in the antrum, in some instances, the result of the inflammation, as was stated in the pathology. These must be broken down when they occur; the opening as described can be enlarged or an opening can be made through the canine fossa. One thing that favors recovery is the fact that, in pathological cases, the opening in the nose is much larger than in normal cases. This trouble has been treated and cured by the injection of fluids through the opening into the antrum through the inferior meatus, under the inferior turbinated bone. Mikulticzs first advocated opening into the antrum through the inferior meatus under the inferior turbinated bone. He uses a small trocar and canula, slightly bent, putting the point of the instrument well into the nose and beyond where the lachrymal duct enters the nose, and pushes it out and upwards until he feels it has entered a cavity. The trocar is withdrawn and the cavity washed out. Kuster of Berlin advocates about the same way of operating. The nose is first put under the influence of cocaine. Some operators open both through the inferior meatus and between the bicuspid and molar teeth; by this means they can easily wash out the antrum. The method by which the operation is done will depend upon the one by whom the case is discovered, doctor or dentist. I believe, though, there will be in the future fewer openings through

the alveolar process, because we are finding the trouble out every day nearer its beginning. A number of men treat the cavity by the dry method; the cavity is cleansed by irrigating it well, drying it thoroughly by blowing in air, then iodoform, iodol, or any good antiseptic powder. Some brilliant successes have been had from this treatment. Packing the cavity after curetting, with either bichloride or iodoform gauze is often done. But whatever plan of treatment is decided on, it must be thorough. The cavity must be made clean and kept cleaned. We have a good helper in cleansing in hydrogen peroxide or pyrozone. I would like to call attention to one little point in washing out the cavity, that is, do not use much force. Use a fountain syringe with plenty of fluid, do not have it raised very high above the head, and when the water is running into the antrum put the head into different positions, so that the fluid may reach all parts of the cavity. As to the instrument with which to open the cavity, there is nothing equal to the dental drill, but we do not need to go to this expense, any good small bone drill will do the work, even a gimlet has been used. To keep the openings open various expedients have been used, the least irritating are either soft or hard rubber tubes made for this purpose. I have had good results from gold tubes. Although it is in the last few years that we have made the greatest advances in our knowledge of this condition, we are not very far in advance of the celebrated surgeon, John Hunter, in operating. He, over twenty-five years ago, speaks of it in terms that would do to follow today. He says "the first part of the cure, as well as that of all other abscesses, is to make an opening, but not in the part where it threatens to point, for that would generally be through the skin of the cheek. If the disease is known early, before it has caused destruction of the fore-part of the bone, there are two ways of opening the abscess; one by perforating the partition between the antrum and the nose, which may be done; and the other by drawing the first or second grinder of that side and perforating the partition between the root or the alveolar process and the antrum, so that the matter may be discharged for the future by that way."

Stimson Block.

A FEW THOUGHTS RELATING TO ABDOMINAL SURGERY.

BY J. TAYLOR STEWART, M.D., LOS ANGELES, CAL.

The profusion of literature emanating from the most learned surgeons of this and other countries, with their varied and intelligent experience and teachings fully presented to us, would seem to make this effort of mine little better than presumption. I beg, therefore, that I shall not be thought guilty of the assumption of any originality in this reproduction. Notwithstanding all this, there are discrepancies concerning methods in all major operations; and we must, for this reason, exercise the prerogative of independent thought. The marvelous advancement during the present period of celiotomic zeal has admitted certain vagaries, if not absurdities, which may with advantage be abolished.

Abdominal section has been so popularized, as it is so simple of execution, that the merest tyro does it without hesitation. It is often necessary that the country physician or village practitioner do abdominal work. They often, indeed, do it perfectly well, rivalling or excelling that performed by

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their more talked-of and more pretentious neighbor who happns to live in the city. In every village at all remote from medical centers, the resident physician or physicians should be familiar with the technique of abdominal surgery in order that they may, when wanted, render efficient service, life often depending upon immediate operation. I have been, all my professional life, in the country or in small towns; and have been associated with this class of practitioners, and fully appreciate their merit and superiority. They are, many of them, good anatomists and pathologists; all they need is a higher education in details.

No one doubts that, other things being equal, this work is rewarded by its best results and minimum mortality when done by the special surgeon attended by a staff of competent and experienced assistants, in the hospitals especially fitted for such work. But these facilities are not at all times available, and never possible to some patients. It has, however, been demonstrated that results which compare favorably with the best are reached with far less elaborate and pretentious surroundings. It has been shown that the dangers from the atmosphere of the operating-room have been greatly exaggerated; that infection comes from immediate contact. No one, certainly, would operate in an atmosphere freighted with erysipelatous or other highly infectious influences. But any well-lighted, clean room of an ordinary private residence can be safely and speedily converted into an operating-room, entirely safe for any purpose. Strangulated hernia and the accidents during the course of ectopic gestation, appendical inflammation, intestinal, and wounds of other abdominal viscera, may be promptly and efficiently managed if the common-sense details of preparations and toilet be observed.

The subject of micro-organisms, of which so much is written and said, and of which relatively so little is definitely known, has become inseparable from operative surgery. It is unfortunate that so little is known, and, indeed, in the present state of our pathology can be known, of pathogenic processes. The relative importance of so-called pathogenic organisms, as etiological factors in surgical disease, is not satisfactorily determined. But it is to bacteriological research that the world is indebted for the immortal conception of cleanliness in surgery, which has given to abdominal and general surgery, tremendous possibilities. The indications for opening the belly are not so numerous as a few years ago—no operation has been more abused. The embryonic and mercenary surgeons are the only advocates of normal oophorectomy. Many operations now done by the abdominal route will, in the future be done by the vaginal. The treatment of a multitude of inflammatory diseases of the pelvic organs now warranting laparotomy will, in the future be treated conservatively. Such practice is becoming obsolete. On the contrary, appendicitis will constantly meet less leniency at the hands of the surgeon until operation will be the rule, as it should now be under favorable conditions. No competent surgeon should wait an hour after diagnosis has been reached. Suppurating and sequestrated ovaries and tubes will, in the future, be more promptly and thoroughly operated upon.

Not many educated medical men hesitate to accept the modern doctrines of surgical asepsis or cleanliness, but many entertain skepticism as to the utility of the much-vaunted germicides or antiseptics. During the last few years we have felt an inward protest when washing our hands in bichloride solution, permanganate of potash, carbolic acid, etc., etc. These solutions, in the strength used, and for the period of time used in operative work, are not germicidal, nor inhibitory. They are, as employed,

useless, for the reasons assigned, and dangerous in as much as they may lead, it is feared, to a neglect of more rational and reliable details. The necessary and effective cleansing of the hands is effected by conscientious scrubbing in warm suds, using a brush, and giving untiring attention to the nails. The hands thus passed through several changes of suds, then washed in ether or alcohol, and again scrubbed with soap and a brush, known to be clean, using warm sterilized water, have reached the highest degree of asepsis. The hands of every one required to handle anything pertaining to the operation should be as thoroughly prepared. The field of operation should be prepared in much the same way. If time and opportunity afford, the preparation of the patient may occupy several seances. The few instruments required in most abdominal operations should be put into a soda solution and boiled vigorously for twenty minutes. They are now disposed in trays conveniently arranged, needles threaded, and everything being in perfect readiness, the anesthetic may be commenced.

A preliminary subcutaneous use of strychnine and morphine is wise practice, tending to prevent shock, and the use of strychnine in preventing intestinal paresis is, I think, established. The anesthetist, provided with means for meeting complications with ether and chloroform of known reliability, begins his responsible work. He should be a conscientious and competent man. If he is familiar with the responsibility of his work, and is honest, he knows that the patient is entitled to his undivided attention. Recently I saw a patient placed in most imminent peril by the incompetency (and inattention is incompetency) of the anesthetist. Ten or fifteen minutes of arduous effort with artificial respiration and restoratives succeeded in resuscitating him.

The number of assistants should be limited to the number necessary to the rapid and thorough execution of the work. There can be no objection to earnest and desirable spectators, if they do not bring infection. Discursive conversation, jesting, in short, anything which diverts attention from the work in hand, should be discouraged. It is not polite to patient or operator, and is a distraction at the cost of both. The observance of courteous quiet and attention about the operating-table would render less frequent such accidents as leaving forceps, finger-rings and dressings in the belly.

In the matter of incision, it should be ample. If insufficient for easy working-room, it renders the operation much more difficult and tedious, prolonging the exposure of the abdominal contents, less gentle and more prolonged handling of the viscera, and adds greatly to the danger by prolonging the period of anesthesia. The intestines should be held gently out of the operator's way by the use of pads of sterilized gauze, wrung from hot water. No special usefulness attaches to iodoform, nor to its gauze, since both must be sterilized before they are reliable in abdominal work. Sterilized cotton and gauze is all that is necessary. Clean iodoform may be dusted on the wound. Rough handling and prolonged anesthesia determine strongly the mortality.

Cat-gut, as a ligature and suture, is condemned by many whose opinions are entitled to great respect; and advocated by many whose claims on us are equally great. It has been demonstrated by culture tests that cat-gut can be made aseptic, and kept so by a very simple preparation. Boiling in absolute alcohol secures its absolute asepticity, which may be preserved by keeping it in absolute alcohol. It is often treated by ether for a few hours, subsequently by a bichloride solution, and then the alcohol treatment. Its integrity as a ligature can be relied upon for from six to ten days, whether

on pedicle or largest artery. The advantage of ligature destined to absorption is obvious and incontestable. Many abscesses, tedious and dangerous suppurations, and subsequent operations, have resulted from the use of inabsorbable material. In the last month or two I have used it in hysterectomy, vaginal and abdominal, and in several other laparotomy cases, castration of the male, open operation for varicocele, ligature of arteries, etc. In plastic work, freely burying the sutures, terracing the abdominal parietes, depending confidently upon its durability and asepticity, using the gut prepared by Seabury and Johnson. Silk is not needed in the armamentarium of the surgeon, if he is provided with a good article of cat-gut, except in the case of amputation with heavy flaps, where prolonged suture support might be necessary.

As to drainage, there is much difference of opinion. If there has been exposure to infection, as in accidental rupture of an abscess, no one would neglect thorough drainage, and if the septic matter has been widely distributed, preceded by copious irrigation. If the infected area is small, gentle and thorough mopping is better. Drainage is often unnecessarily resorted to, and is sometimes responsible for post-operation infection.

Out of merciful consideration for you, I shall detain you only a minute longer. I want to say, abdominal section for diagnostic purposes is much neglected. In my contracted field of observation, I have recently witnessed death in three or four instances through neglect of this perfectly safe means of diagnosis. In each case the appendix has been the origin. I operated in one case in the presence of a fulminant peritonitis; in two other cases, of large appendical abscesses, consent to the operation not being obtained until patients were practically moribund. Diseases of serious character, involving the abdominal viscera, should be regarded imperative indications for celiotomy. Symptoms indicating inflammatory mischief in the ilio-cecal region should be treated by immediate incision. There is no danger in aseptic, exploratory incision, and almost none in early and clean operation for removal of the appendix. When this practice receives general adoption, the mortality of appendicitis will be reduced to comparative insignificance.

Burdick Block.

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*REVIEW OF THE PATHOLOGY OF PULMONARY TUBERCULOSIS.

BY CHAS. L. STODDARD, M.D., SAN BERNARDINO, CAL.
PRESIDENT OF SAN BERNARDINO COUNTY MEDICAL SOCIETY.

For ages the disease known as pulmonary consumption has occupied the best thought of the profession: hypothesis on hypothesis has been advanced as to its etiology and pathology, yet, until our time, nothing of tangible character has been evolved.

In the writings of Hippocrates, the condition is described, and divided into two forms, phthisis and phthae. Phthisis, that in which abscess existed, and phthae, where ulceration was found or supposed to exist. This division was accepted during the whole of the Greek period, and by the Romans, their successors. Areteus, who lived in the first century of our era, gives the following somewhat quaint description, which I think worthy of quoting as an example of the acuteness of observation of the ancients: "The voice is hoarse, the neck slightly twisted, elongated, and is not easily turned to either

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side, being, as it were, somewhat stretched; the fingers are lean, though their joints appear thick,they seem mere bones so much has the flesh sunk away; the nails are advanced; the abdomen is wrinkled and flat from loss of flesh, it neither preserves its filletting nor rotundity, for the same reason the nails become curved, for the fulness of the finger ends, that used to expand and support, have become, as it were, solid, which causes them to feel painful. The nose is pointed, the cheeks flushed and prominent, the eyes are sunken, but sparkle with a liquid luster; the face is puffy, pale and livid, the thin parts about the jaws stretched on the teeth. The patients wear a ghastly smile, and their whole appearance is of this character; they are emaciated and fleshless; the muscles of the arms are indistinct, with no vestiges of breasts, the nipples merely visible. You may not merely count the ribs, but see where they end, for not even are their articulations with the vertebrae well concealed, nor where they overlap the sternum; the interval between them is hollow and curved; the hypochondria are sunk and retracted, the epigastrium and flank adhere, as it were, to the spine. The joints of the leg, hip and arm become conspicuously prominent and devoid of flesh, and the spines of the vertebrae, which were originally in a hollow, now project from the wasting of the muscles on each side. The shoulder-blades are seen jutting like bird's wings. If in such a case the bowels become disordered, it is hopeless, if the patients have a tendency to recover the reverse of these symptoms occurs. The slender figure, with the breast flat as a board, wing-like scapulae, prominent throat, fair complexion and very narrow chest, is the subject of this disease, to the production of which cold and damp situations are favorable. The fever is perpetual, and never seems to cease, though it is marked during the day by the perspiration and coldness of the body; and it is the peculiar character of phthae for fever to revive and light up towards night, and to conceal itself in the bowels during the day, though it is still manifest by languor, loss of power and wasting of the patient."

From the time of Areteus nothing worthy of note was developed as to its etiology, pathology or therapeusis until the researches of Laennec, in the past century. Certain pathological bodies were frequently found on post mortem examination, differing from the products of ordinary inflammations; to these bodies, from their physical appearance, the name of tubercle was given, and specific properties assigned to them, the word, specific, being merely a cloak for their ignorance on the subject. Inflammation was generally assumed as the cause of their production. Good, in his study of medicine, says that a certain degree of inflammation was favorable to the growth of tubercle. Broussais also favored this theory, and our own Rush carried his views to the extent of free venesection. Andral states that if the tendency exists, the slightest local congestion may give rise to tubercle. Allison states that acute or chronic inflammation does certainly, in certain constitutions, occasion the development of tubercles. Majendie always found the most recent tubercles, even in the youngest subjects, surrounded by a vascular zone. On the other hand, many strongly opposed the inflammatory origin of tubercle, among whom Bayle was prominent. Laennec, to whom we are indebted for the most exhaustive studies of this disease, admitted inflammation only as a coincidence or consequence, not as a factor in the production of tubercle. He regarded tubercle as the primary cause of the consecutive phenomena, and taught that it was a specific, morbific virus exuded from the blood, and by its presence and subsequent changes produc-

ing all symptoms and pathological results. Later, Virchow taught that tubercle was a product of excitement, or a result of the deterioration of the products of inflammation. Laennec and his followers taught that only the gray form was true tubercle, the yellow being but the softening stage of the gray tending to suppuration. Virchow and his school distinguished no practical difference between the gray and yellow, and demonstrated that the caseous is not necessarily a secondary stage of tubercle; that it is in fact formed before the gray, and that cases occur where all the symptoms of phthisis are found which on post-mortem show no gray granulations.

The anatomical appearance of the lungs affected with tuberculosis, on post mortem, presents many different stages of disease, cavities or vomicae, infiltration of parenchyma, the smaller bronchi, bronchioles, and air vesicles with cheesy matter, in various stages; together with tubercles of the miliary variety, and other bodies, presenting the appearance of tubercles, which on closer examination are found to be sections of infiltrated bronchi, and air vesicles, from which the areolar tissue has receded. Usually the caseous degeneration has been completed, however. We also find purulent deposits, cicatrices from old vomicae, and vomicae whose walls are patent, either by deposit of calcareous matter, or the formation of pyogenic membrane. We also find masses which have assumed a calcareous or mortar-like appearance. Niemeyer says in relation to this, "Little by little their organic matter disappears, while the calcareous salts are deposited until there finally is left a chalky or mortar-like concretion." In other cases again the arrested fatty metamorphosis of the cells is again re-established, and they become capable of reabsorption." While one or the other of these processes is going on in the cellular elements involved in the caseous degeneration, an extensive proliferation of the connective tissue is being developed in the lungs. The calcified deposits are incapsulated, and the space rendered vacant by the cells which have suffered fatty degeneration and liquefaction, is filled with connective tissue. Where such parenchymatous solidification is established, a dilation of the larger bronchi is produced by efforts at forced inspiration.

The question of the seat of tubercles has given rise to much controversy, some holding that true tubercle is only found in the inter-vesicular areolar tissue. This is advocated strongly by Virchow. Villemin and Lebert maintain that cheesy masses found in the intra-vesicular area are as fully entitled to the name of tubercle; all, however, allow that the principal site is the inter-vesicular tissue.

Such, in brief, was the condition of our knowledge regarding pulmonary tuberculosis, when, a few years ago, Robert Koch, working in conjunction with other biologists on the subject of the pathogenic bacteria, succeeded in isolating the *tubercle bacillus*, and in proving its etiological relation to tuberculosis by a series of brilliant and exhaustive investigations, proving its uniform existence in the disease, and its inoculability, resulting in the frequent production of the varied phenomena peculiar to it, where suitable conditions existed. He has shown that certain animals were peculiarly susceptible to it on inoculation, while others appeared to possess a certain immunity, among which man formed no exception. He has proved that tubercles of characteristic gray type could be produced in a short period after inoculation of pure artificially-grown cultures. Notwithstanding the criticisms of skeptics on the subject, few are now found who deny its etiological relation, though some still claim that it is an epiphenomenon, having no influence in the production of the disease, the peculiar exudation being merely a good

culture medium for its growth and reproduction. Such universal acceptance have these facts attained that few at the present time can consistently diagnose the disease in its incipiency without the aid of the microscope. We are no longer in doubt, as in the past, on questions relating to the various lung diseases in their incipiency, the presence of the bacillus gives assurance as to the nature of the malady, and its early recognition gives the best prognosis for guidance of our treatment.

Koch asserts that whenever tubercle bacilli exist in sputum, tuberculosis exists; that their numbers are a good general guide to the intensity of the disease, no matter what the clinical evidence or the macroscopical appearance on post mortem, and that this is no assumption, but verified fact. As to the process by which the bacilli produce the tuberculous exudate it may be assumed to be analogous to that of diphtheria, where a bacillus by local irritation gives rise to the diphtheritic exudate, and also an analogous toxine, though differing in kind and degree of toxicity. To the toxine produced by the tubercle bacilli, we may attribute the various symptoms of at least the early stages, such as night-sweats, fever, and emaciation; while in later stages the suppuration induced, perhaps by the agency of other pyogenic bacteria, probably intensifies or modifies the conditions, as in other diseases, notably diphtheria, where, according to authorities on the subject, secondary bacteria intensify the process.

Koch's failure in the matter of tuberculine should not, as is frequently the custom, result in throwing any degree of discredit on his wonderful discoveries, as his experiments, though proving unsatisfactory, were conducted on correct scientific lines. He still asserts that when the lymph is perfected it will prove to be all he has hoped for. Recent experiments with its modified form, antiphthisine, have given good results, as proved by Von Ruck of Asheville, where he claims that the bacilli were eradicated and cures effected in many cases of advanced phthisis, after other measures had failed. The experiments of Shurley and Gibbes have also shown that immunity can be induced and the bacilli eradicated by their method. In this they are corroborated by numerous investigators, who report successful results, when treated at an early stage, before destructive pathological lesions rendered the condition hopeless. We are at present in a state of expectancy of some grand result from some similar experiment, with a firm belief of success, either through an antitoxine, immunized serum or other specific, perhaps a choice of several may be presented. Is it not possible that some medicinal agent may exist, having analogous power over tuberculosis that mercury has on syphilis.

Already results are attained in this disease which were impossible before a correct knowledge of its etiology was discovered, *the bacilli can be eradicated or rendered innocuous*, has been proved in numerous cases by experiments on animals and man, when treated at an early stage. Animals have in hundreds of cases been rendered immune to inoculation of the bacillus, when others, for check experiment not so treated, quickly succumbed to the inoculation, with the production of the specific pathological lesions shown on dissection. I have made experiments in this direction, and find these facts to be correct.. When this is attained in fuller degree than at present, we will be enabled to bring confident hope to the victims of this fearful disease, where in the past we could only, acting on our best knowledge, give doleful prognosis, our efforts at cure being in too many cases hopelessly ineffectual, and our art in this direction the opprobrium of medicine.

RESECTION OF THE SKULL.*

BY CARL KURTZ M.D., LOS ANGELES.

Although trephining is but a resection of the skull, the operation as generally understood by the practitioner is the removal of a circular disk of bone with an instrument called the trephine.

Now, in contradistinction to this operation, the term that I have used for the title of this paper implies the removal of any piece of bone from the cerebral vault, either temporary or permanent, whether made with the circular saw, osteotome or *rongeur*. I believe the chisel is rapidly taking the place of the trephine, and that in a few years the latter instrument will be almost, if not entirely, obsolete; at least as far as the opening of the cranial vault is concerned for the removal of cerebral tumors.

Resection of the skull is by no means a new operation. It was known to Galen and Hippocrates, and was practiced by some of the Indian tribes of America long before medicine became a scientific study. Although this branch of surgery lay dormant for many years, it has made wonderful strides since the introduction of antiseptics. The cranial cavity is, today, entered with as much impunity as the abdominal, and tumors of the brain are fearlessly, at times recklessly, removed. Since the removal of the first tumor by Goodlee in 1884, 81 cases have been operated on, 74 cerebral and 13 cerebellar; of these 38 cerebral and 2 cerebellar have recovered—a most wonderful result when we take into consideration the grave nature of the operation.

The opening of the skull itself, however, is by no means a dangerous procedure; it is attended with a mortality of but 3 per cent. Death is, as a rule, due to shock, and this is in a great measure dependent on the amount of time consumed by the operation. It is, therefore, essential that operations on the brain be made as quickly as possible. The high death rate which accompanied the operation in the pre-antiseptic period was due to infection.

Before making a resection it is well to bear in mind that the thickness of the cerebral vault varies in different individuals as well as in different localities of the same individual; it is thinnest in the temporal region. The external table is thicker than the internal, and the diploe is almost, if not entirely, wanting in children and the aged. The position of the longitudinal and lateral sinuses must also be remembered. A thorough study of cerebral localization must be made by every surgon intending to operate on the brain. He should never be satisfied with his own diagnosis, but should always call into consultation an experienced neurolgist.

It would be impossible for me, in this article, to enter into the study of cerebral localization, the time allotted is too short; furthermore, excellent treatises on this subject, better than I could give, can be found in any modern text-book on nervous diseases. Surgery of the brain has kept well apace with the wonderful advances made in surgery in general; the surgeon is not only called upon to remove a few splinters of bone from a depressed fracture, but to remove large plates of bone in order to treat conditions lying within the cranial vault, whether dural, sub-dural or cerebral.

When and under what conditions shall we make a resection of the skull? The indications have been so thoroughly reviewed by our modern text-books that undoubtedly you are all familiar with them; however, they will bear

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repetition, and I have no doubt that some will be new to you, perhaps, to some of the old practitioners they may seem a trifle radical.

1. We are called to make a resection in complicated fractures, when it is feared that infective matter has entered the wound, or when it is known that the cranial cavity has been penetrated by some dirty knife or instrument.

2. In fractures to which an unclean dressing has been applied.

3. When we suspect a fracture of the inner table or for depressed fractures.

4. For the removal of foreign bodies, bullets, knife blades, etc.

5. For cerebral hemorrhage, with signs of compression, and for the ligation of the middle meningeal artery.

6. For fractures which have subsequently become infected through carelessness on the part of the surgeon or attendant.

7. For tumors of the brain, abscess of the brain, epilepsy and chorea, when due to trauma, syphilis and tuberculosis.

The operation should always be made under the strictest aseptic precautions. The entire head must be shaved, and the ears cleansed and plugged with aseptic cotton. If there be an eczema of the scalp present, it is best, when possible, to defer the operation. After scrubbing the scalp thoroughly with soap and water, potassium soap preferred, it is advisable to wash the scalp with ether, thereby removing all traces of fat. An antiseptic solution, carbolic acid or sublimate 1-1000 can now be used to complete the preparation. The operation, whether for depressed fracture or for cerebral tumor, should, in my opinion, not be made with the trephine, as was formerly, and is still being done, but with the chisel and mallet. This opinion is based upon a great many operations that I have seen in the German hospitals. My objections to the trephine are many, and I believe they are well founded. The instrument is one that is extremely hard to keep clean, it is complicated, and at times by no means easy to manage. It can be had only in certain sizes, and as a rule the surgeon has but one of these, possibly two, in his armamentarium; the one might be too small, the other too large. An instrument two inches in diameter is not practicable, for it cannot be adapted to the convexity of the skull. The trephine can be applied only over an uninjured portion of the bone, and therefore always removes a plate of bone that is perfectly healthy. The reimplantation of this disk is by no means satisfactory, it being followed very often by necrosis.

The chisel, on the other hand, is a simple instrument, and can easily be made aseptic. With it the opening into the skull can be made as large as necessary, and no more bone need be removed than is actually required. The objection has been made that the striking of the chisel with the mallet causes more or less concussion of the brain. This objection can easily be overcome by the proper use of the instrument. The osteotome, which, by the way, should be light, and gradually taper toward its cutting edge, should be applied to the skull at an oblique angle, and struck with a short, quick movement of the mallet. The surgeon should handle the chisel with as much skill and technique as the sculptor does in modeling a work of art. I will admit that, by striking a strong, sharp blow, more or less damage might be done, but then we are not supposed to handle our instruments as the cobbler or mason does his tools in squaring a piece of granite. If the trephine be not the proper instrument for exposing the brain, how, then, should this be accomplished? I believe the best method of entering the skull when this is

intact is by means of an operation recommended by Wagner—the temporary resection of the skull. During my term as interne in the Moabit Hospital, I had occasion to see it performed at least one-half dozen times, and was so favorably impressed with this method that I do not hesitate to recommend it. I am sorry to state that I have not seen the operation mentioned in any of our late works on surgery, and as our access to medical literature in this Western country is still very limited, I am unable to state what success the method has met with.

The temporary resection gives an opportunity of making a large opening into the cranial vault without the sacrifice of any bone. A horse-shoe-shaped incision from two to three inches in diameter is made through the tissues of the scalp, down to the bone, care being taken when possible to avoid the region of the sinuses; following the line of this incision a groove is cut into the bone with a gauge. The instrument that I have here is admirably adapted for this purpose. The groove is made simply as a guide for the osteotome. At the greatest convexity of the wound, according to Wagner, a small opening is made with a trephine; this serves for the introduction of the elevator at a subsequent stage of the operation. I believe this step can be dispensed with, it only lengthens the operation, a point which should by all means be considered. The osteotome is now used, beginning at the upper margin of the wound and following the groove around to the opposite side, care being taken on reaching the inner table not to injure the dura. The bridge of bone between the two arms of the horse-shoe should now be partially cut through sub-periosteal. The chisel or elevator is introduced at some point in the convexity of the flap, and the whole plate of bone, covered with pericranium and scalp, is pryed up, the bone breaking readily at the base of the flap; the whole flap is now gradually turned back, care being taken to relieve it from any adhesions with the dura.

The hemorrhage from the diploe is at times so severe that it will be found necessary to plug the bleeding vessel with gauze, catgut or an ivory peg. Horsely has lately recommended wax, prepared antiseptically, for this purpose. If localization has been perfect, we must find the seat of trouble within the area exposed by the operation, the condition of the brain, its color, consistence, and pulsation will be our best guide. The bulging of the brain into the opening is indicative of some pathological condition below the dura, either blood clot, tumor or abscess. When it is found necessary to open the dura, this should be done with a tongue-shaped incision; a small opening should be made with the scalpel, and then enlarged with the scissors. If on opening the dura we are led to suspect the presence of an abscess, the diagnosis must be confirmed with the aspirating needle. Should pus be withdrawn with the aspirator, it will be necessary to make a free incision through the brain substance down to the pus cavity, evacuating the latter and establishing free drainage. Abscess of the brain is generally the result of an otitis media, and consequently located most frequently in the tempero-sphenoidal region.

Wagner's operation should be made with the base of the flap toward the sagittal suture; for the passage of a drainage tube, a piece is bitten out of the bone flap with the *Rongeur* forceps; the tube is shortened from day to day, as the pus cavity collapses.

When cerebral abscess is the result of injury, it does not necessarily follow that it should be immediately under the cicatrix, and localization, unless

made by an expert, is at times extremely difficult. Unless brought to view by the small opening of the trephine, it would be necessary to trephine a second time, involving a great loss of time and the sacrifice of much bone. How much simpler and how time-saving it is to make a large opening at once, as recommended by Wagner. For abscesses and tumors of the cerebellum, the operation should be made below the superior curved line, in order to avoid the lateral sinus.

In conclusion, a few cases which will cover some of the points in this article might be of interest to you.

In 1891, a patient was brought to the Moabit Hospital in a comatose condition; his friend stated that he had been struck upon the head with a brick, which had fallen from the fourth story of a building. His pulse was full and irregular, about 70 beats to the minute, breathing sterterous, and the right pupil widely dilated, left normal. Over the right parietal protuberance was a wound down to the bone, but no fracture could be felt. On lengthening the wound, a fracture was discovered running toward the ear. A trephine was applied, and a piece of bone 2½ c.m. in diameter removed, disclosing a blood clot. Fresh blood was still oozing up from below this coagulum. The incision was continued around the ear to the zygomatic process, and the opening in the skull enlarged anteriorly, but still the bleeding points could not be reached. A second opening was made at the anterior portion of the wound with the trephine, and the bleeding points, branches of the meningeal, disclosed; being unable to ligate the same, the artery forceps were allowed to remain and the wound tamponed with gauze. On the second day the artery forceps were removed and the wound redressed. The patient had regained consciousness in the meantime. The opening made into the skull was ¾ of an inch wide by 3½ inches long; how to close it was the question. About this time an article had been published in one of the Vienna journals, author unknown, recommending the implantation of celluloid plates. This was tried, but instead of the celluloid healing into the wound, as was expected, it acted as a foreign body, and had to be removed. I believe if Wagner's operation had been made, a great deal of time would have been saved and the sacrifice of so much bone would have been avoided.

During the early part of 1892 a patient came to the hospital with a wound over the left parietal bone. He stated that he had been stabbed with a dirty pocket-knife. On examining the wound, which, by the way, was very dirty, it was found that the knife had entered the skull; there were no signs of compression. Suspecting that the wound was infected, it was decided to make a temporary resection. The patient was immediately prepared, and Wagner's operation made with the base of the flap toward the sagittal suture. On elevating the bone, a tear was found in the dura. This was stitched, the wound carefully disinfected, and the flap replaced. The patient made an excellent recovery.

The following case I quote from memory:

Gretchen M., age 12 years, received an injury to the right side of the head some years previous to her admission to the hospital. Some time thereafter she developed choreic twitching about the face and athetotic movements of the left arm and hand. In 1891 she came to the hospital, and was operated on by Prof. Sonnenburg. Wagner's operation was made; at that time the dura was found adherent to the bone, and a number of cysts removed. The wound healed completely in about three weeks, the convulsions subsided,

and in the next four or five months she showed remarkable improvement, when she again developed the foregoing symptoms, and it was decided to make a second operation. A resection about one inch wider than the original was made in the same region, and included the area of the above operation. A number of cysts were again removed from the dura, and the wound closed. The patient was doing well when I left the hospital.

The last case is one that occurred just one year ago, when I should have been, as probably some of you were, enjoying the banquet at the Westminster. On December 7, 1893, I was called to the County Hospital about 8 p.m. I found a patient in a comatose condition, and learned that he had been struck with a large boulder. His pulse was 60; respiration sterterous, and the left pupil widely dilated; the right was normal, and reacted to light. Over the right parietal bone was a deep wound, three inches long, at the bottom of which could be felt a depressed fracture, covering an area of ¾ inch by 2 inches. The fragments, a great many, were removed and the edges of the wound trimmed with a chisel; a large blood clot was found which had dissected up the dura as far as the finger could reach; this clot, perhaps one-half coffee cupful, was removed, and a severe hemorrhage met with from the dura and bone; it being impossible to locate the bleeding points, the whole space occupied by the clot was tamponed with iodoform gauze. The following day the patient regained consciousness; his speech was still somewhat labored. On removing the tampon, thirty-six hours after the operation, a secondary hemorrhage was met with from the diploe. The bleeding point was found, and the vessel plugged with iodoform gauze. This plug was removed on the fifth day, and the wound united. Patient was improving splendidly until December 16th, when he again became restless, and later unconscious; there was complete paralysis of the left side, right pupil was dilated, pulse 60, respiration 16, sterterous. Abscess was suspected; the wound was opened, but nothing abnormal found. The following day it was decided to make a second operation. The skull was opened with the chisel, over the region of the fissure of Rolando, and the dura opened, but only the healthy-looking pulsating brain found. This wound was closed, and the patient put to bed. Contrary to expectation he recovered from this operation, and in a few days was again able to move his limbs. By the 24th of December, he had recovered sufficiently to be removed to the Sisters' Hospital. About the 27th he again developed signs of compression; the temperature rose to 103, the pulse was quickened, and respiration was somewhat labored. There was a slight hernia cerebri. On the 28th deep coma set in, and respiration became very sterterous. Again suspecting an abscess, an aspirating needle was thrust deeply into the brain, in different directions, with the expectation of getting pus, but each time without success. The patient died the following day. At the autopsy an incapsulated abscess, about the size of a pigeon's egg, was found in the ascending parietal convolution. The pus was very thick and viscid, and for this reason I was unable to remove any with the aspirator, although a large-sized needle was used. What the compression was due to the second time I do not know, but it was evidently relieved at the second operation, although nothing was found.

147 South Main street.

SELECTED.

DEPARTMENT OF SURGERY.

UNDER THE CHARGE OF JOS. KURTZ, M.D., PROFESSOR OF CLINICAL SURGERY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA, AND CARL KURTZ, M.D.

A CASE DIAGNOSED AS TUBERCULAR MENINGITIS TREATED BY TREPHINING AND DRAINAGE OF THE SUBARACHNOID SPACE.—W. Wallis Ord, M.D., and Herbert F. Waterhouse report the following case in the London Lancet: A girl, 5 years of age, was admitted to the Victoria Hospital, October 23, 1893. Up till five weeks previously she had been perfectly well, and never had either fit or otorrhea; but about the middle of September she began to suffer from acute pain in the head. She had occasional vomiting, was very fretful, appetite bad and her bowels were constipated. There was no tuberculous family history. When first seen the child presented a dull heavy appearance; she was very restless, and uttered from time to time a shrill scream. When asked if she felt pain, she put her hand to her forehead; she lay with her head bent forward and her legs drawn up. The temperature was 101.6 degrees, the pulse 104, regular but weak; respiration, 20. There was no lesion discoverable in the thoracic or abdominal viscera. Tache cerebrale was well marked; the knee-jerks were normal. There was commencing optic neuritis in both eyes, less marked in the right. During the first night she was very restless, constantly screaming. There was no vomiting, but she took food badly. On the night of October 25th she was evidently suffering from great increase of pain; she screamed almost without intermission from the evening of that day until 6 a.m. next day. There was no retraction of the head or vomiting. The pulse at 2 p.m. was 108, regular; she referred the pain to the frontal region, growing rapidly worse. The pulse became wavering in a striking manner, at one time 120 and regular, soon after 70 with intermissions, and then again 80 with no intermission. The child was lethargic and apathetic, except for the typical hydrocephalic cry she uttered at times, lying on the left side, legs flexed, she had the appearance of one rapidly passing into a state of coma. The abdomen was retracted, face pale, and the tache cerebrale well marked; temperature 101. On examining the eyes we found the pupils had been dilated with homatropine, and therefore no account can be given of their size or mobility, but notes stated they had been contracted on admission. There was no ptosis or strabismus, as far as could be ascertained. Ophthalmoscopic examination proved optic neuritis, more marked in left than in right eye. The membranae tympani were both in a healthy condition. Our diagnosis was tubercular meningitis, and as the child was rapidly approaching the stage of coma, there was every probability of death taking place in a few hours from compression, unless the pressure should be relieved. On these considerations we agreed that an operation for the relief of the pressure was both justifiable and advisable. It was decided to open the subarachnoid space, and to drain it for a few days. There was some doubt in our minds whether to open the subarachnoid space of the brain or of the spinal cord, but eventually it was decided that the opening should be made into the cranial cavity, and we were convinced that this was the right decision. Accordingly, at 5 p.m., the child was placed under chloroform; and, after shaving and rendering the scalp aseptic, a curved incision about 2½ inches long was made over the left cerebellar fossa

of the occipital bone, commencing below and behind the mastoid process, passing with its convexity upwards, ending externally to the external occipital crest. The occipital artery was divided and tied, and the pericranium was raised in a flap, corresponding to the scalp flap; there was some bleeding from the mastoid vein. A trephine ¾ inch in diameter was then applied midway between the external occipital crest and the mastoid process. The disc of bone removed was placed in warm boric solution. The dura mater bulged tensely into the trephine-opening, and no pulsation was observable. The dura mater and arachnoid were then incised and some thirty drops of a slightly greenish serous fluid escaped. The cerebellum then bulged in the foramen in the skull, fitting it tightly, like a cork in a bottle. A silver probe, the terminal half-inch of which was bent to a right angle, was then inserted between the cerebellum and the arachnoid inwards towards the falx cerebelli. As soon as the latter was felt the probe was rotated, so that the end projected forward into the large subarachnoid space between the cerebellum and the medulla. Some drachms of the serous fluid at once escaped. A drainage-tube was then passed along the probe and left in position; it was found that fluid passed slowly through it. The dura mater was then sutured and the disc of bone was cut into small fragments with bone-forceps, these were packed carefully in a mosaic, after the manner of Prof. Macewen, so as to fill the foramen, leaving only room for the drainage-tube in the center. The latter was then brought out through a hole made in the center of the flap which was readjusted with horse-hair sutures and the wound dressed with cyanide dressings. The child bore the operation well, the pulse rose from 80 to 120 on the removal of the fluid.

October 26th, 11 p.m. The child is doing well; the temperature normal; she has been a little sick during the evening, but she has not shrieked or had any convulsive movement.

October 27th. She passed a good night; vomited twice; pulse 112; temperature rose to 102.6. The wound was dressed, the dressings were soaked with blood-stained serous discharge.

October 28th. The child is sensible and answers questions. She passed a good night. At 2 p.m., temperature normal; at 6 p.m., 103; at 10 p.m., 101. The optic neuritis is less marked than it was before the operation, but it is still more noticeable in the left eye than in the right.

October 29th. The child is better; temperature 6 p.m., 102. She takes food well. The discharge from the wound has soaked through the dressings, which were changed.

October 30th. Slept pretty well during the night; temperature 97.6 (10 a.m.); wound dressed. In the afternoon Mr. Holmes Spicer kindly examined the child's eyes, and reported: "Both discs are in the same condition; a considerable amount of glistening white effusion, extending for some distance from the optic disc, is present; the veins are engorged and tortuous. No hemorrhages or tubercles of the choroid can be seen."

November 2d and 4th. The wound was dressed; it appeared healed, except where the drainage-tube emerged.

November 6th. Wound dressed; appeared to be breaking down in some parts; the stitches were removed; the child vomited several times during the day.

From November 6th to 20th, the wound suggested strongly a tuberculous infection, with its gelatinous-looking granulations and their watery discharge.

The tube was removed on the 13th. The temperature during this period varied from subnormal to 103.4, rising and falling fitfully. On the 20th, Mr. Spicer reported: "There is a considerable amount of swelling of both discs, but more in the right than in the left. The margins are indistinct, but there is less of the glistening, white effusion than there was at the last examination." About this time two small granulations were removed from the wound, but the examination of them by Dr. Arkle proved negative.

November 27th. During the preceding week the child has improved remarkably.

Mr. Spicer reports: "The condition of the eye is much the same as last week. The top of the disc can be seen with + D. The wound was dressed with boric ointment; there was very little discharge.

November 30th. The child was apparently quite well. She sat up for her meals at the table in the ward; she said that she felt quite well, and had had no headache since she had the chloroform. The temperature fell to 98 on November 18th, and never rose after that above 98.8 until the middle of December, when the child had an attack of measles, from which she recovered without a bad symptom."

Personally, I had for some years considered that early operation for the purpose of relieving the effusion in cases of meningitis was a method of treatment that should be tried. I think I was originally led to this by reading a passage by Prof. Henoch of Berlin in a clinical lecture on tubercular meningitis. He says: "I do not regard it as impossible to bring about recovery by opportune treatment at the beginning of the cases, when the tuberculosis is not general but localized, as our main object at this stage is to arrest the commencing inflammation of the dura mater, and to prevent a more extensive exudation, which may affect the cortical substance of the brain."

We think that we may fairly state that this was a case of acute meningitis with effusion, but the fortunate result renders it impossible for us to state absolutely that it was of tubercular nature. The condition of the child, however, was that with which we are accustomed to associate tubercular meningitis, and there was not one of eight medical men who saw the case first who did not concur in our diagnosis. In operating early we were guided by the consideration that this mode of procedure should be attempted, if possible, before any marked signs of pressure have become developed, as we consider that the amount of pressure necessary to produce all the classical symptoms may come dangerously near causing permanent cerebral lesion.

DEPARTMENT OF MEDICINE.

UNDER THE CHARGE OF DRS. F. D. AND ROSE T. BULLARD.

A NEW TEST FOR THE DETECTION AND QUANTITATIVE ESTIMATION OF FREE HYDROCHLORIC ACID IN THE GASTRIC JUICE.—By Julius Friedenwald, A.B., M.D., Baltimore (Medical Record, April 6, 1895). The examination for free hydrochloric acid is of great importance in the diagnosis of diseases of the stomach. A new reagent has been recently described as reliable and simple. It is dimethylamidoazobenzol; it is highly recommended by G. Toepfer, who used it, as follows: A 0.5 per cent., alcoholic solution is prepared. Three to four drops of this are added to the gas-

tric filtrate. If a reddish color is produced, free hydrochloric acid is present; if a yellowish discoloration, it is absent. The quantitative test is also described. As the phloroglucin-vanillin test of Gunzburg and the resorcin test of Boas are very accurate, it is necessary that any new substance should fulfill the following conditions: 1. It must only react to free mineral (hydrochloric) acids, and to very small quantities of the same. 2. It must not react to organic acids or other substances likely to be present in the gastric contents. Dr. Friedenwald's experiments show that this test is more sensitive than the two just mentioned. He concludes: "Inasmuch as dimethylamidoazobenzol is a very accurate reagent for the determination of free hydrochloric acid, and as by its use the method of making quantitative examinations is greatly simplified, we highly recommend it for this purpose. It is of importance to state that we have used filter-paper dipped into the solution of dimethylamidoazobenzol and allowed to dry, with great advantage, as a test-paper for the detection of free hydrochloric acid."

THE CAUSES OF DEATH.—(Pacific Med. Journal). According to the census of 1890, of every 10,000 deaths in the United States, 1 will be from calculus, 35 due to Bright's disease, 40 to fevers, other than typhoid, 596 rheumatism, 70 to scrofula, 130 to cancer, 140 to apoplexy, 148 to whooping-cough, 160 to dysentery, 190 to meningitis, 220 to scarlatina, 246 to ague, 250 to convulsions, 310 to typhoid fever, 350 to heart trouble, 480 to diphtheria, 880 to diarrhea, and 1420 to phthisis. Of this number, 2210 are from typhoid, diphtheria and phthisis, all of which are preventable, and if we take in whooping-cough, dysentery, scarlet fever and diarrhea, we shall have more than one-third of all deaths at the present time from preventable causes.

THE TREATMENT OF ERYSIPELAS WITH STRONG ALCOHOL.—Medical News, Langsdorff (Centralblatt fur Chirurgie, 1895, No. 8, p. 189), reports the employment of topical applications of strong alcohol in the treatment of thirty-two cases of erysipelas. Soft, thick linen compresses are saturated with the alcohol, and are renewed every fifteen or twenty minutes, being covered with dry cloth and gutta-percha tissue. If the face is affected, cotton compresses are used instead of linen, as adapting itself better to the irregularities of the surface. The compress must be saturated with alcohol, and should be frequently changed. In all cases thus treated the symptoms speedily receded. Some little discomfort was experienced from the applications when the face was involved and in the case of sensitive persons who were unpleasantly affected by the odor. The redness and tension often disappear in the course of eight or ten hours, after which the intervals of application may be lengthened. Recovery, as a rule, resulted in the course of two or three days. If the morbid process manifested a disposition to extend, the applications were made to include the new areas involved. For the dryness of the skin following the applications lanolin was found serviceable. Official absolute alcohol diluted with 1 per cent. of water was employed.

THERAPEUTIC EFFECTS OF CARBONIC ACID.—(New York Medical Journal, March 9, 1895.) Dr. A. Rose advocates strongly the use of carbonic acid in dysentery, the vomiting of pregnancy, whooping-cough, prostatitis and impotence. The apparatus he employs consists of a bottle holding a pint or more, with a wide mouth and a rubber stopper, the latter perforated so as to admit a glass tube, which at the external end is connected with a rubber tube, at the farther extremity of which is a nozzle to be introduced into the rectum. The bottle is filled one-third full of water, the glass tube reaching to within one or two inches of the level of the water. Into the

water, he first puts about six drachms of bicarbonate of sodium, and then, when it is ready, adds half an ounce of large crystals of tartaric acid (if the pulverized is used, the development of gas goes on too rapidly). The bottle is then closed quickly; the carbonic acid rises through the tube and inflates the rectum. Any position, Sim's, for instance, may be used. As soon as meteorism or a considerable sensation of tension is felt in the rectum, the nozzle may be withdrawn, or the patient may, while the nozzle remains *in situ*, free himself from as much gas as he cannot well retain in the rectum. The inflation is then repeated as many times as required, until all the gas in the bottle is exhausted. He reports very satisfactory results in all the diseases mentioned.

QUININE IN ENURESIS.—(Univ. Med. Mag.) Dr. Charles S. Potts, who first advocated the use of quinine for enuresis, reports two more cases. In one, a female, aged 12 years, four grains four times a day caused disappearance of the trouble; in the other, a female, aged 19 years, four grains three times a day, caused such marked improvement that she has experienced no trouble of the sort for several weeks. The writer thinks the few cases reported by himself, together with those described by Dr. F. F. Rowland of Pasadena, in the Southern California Practitioner, April, 1894, would seem to prove the marked value of the drug in this disagreeable infirmity, and hopes others will give it a trial and report results.

OBSTETRICS AND GYNECOLOGY.

UNDER THE CHARGE OF WALTER LINDLEY, M.D., ASSOCIATE PROFESSOR OF GYNECOLOGY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA.

THE CONDUCT OF ORDINARY LABOR THROUGH EXTERNAL EXAMINATIONS SOLELY.—Drs. Leopold and Sporlin (Medical News) make a warm plea for limiting examinations made in the course of ordinary labor to the external parts, and adduce the advantages of such a course. Infection is thereby avoided, the natural sense of modesty of the parturient is not offended, and careless rupture of the membranes is avoided. Skill in external examination is acquired with reasonable readiness. In the large majority of cases such examination alone is sufficient for the recognition of the position and presentation of the fetus and for the study of the course of an ordinary labor. As there can be no objection to its frequent exercise, abnormalities of parturition may the more readily be detected early and means of correction be promptly employed. Experience soon teaches the difference in the position of the fetus assumed in case of pelvic contraction on the part of the mother. The position and presentation having been recognized by external examination, internal examination for the determination of possible pathologic conditions of the birth canal need be but brief, and can be conducted with great care. For the attainment of this desirable result it is essential that the obstetric pupil familiarize himself thoroughly with the conditions of normal labor as determined by physical external examinations, as well as with the physiology of normal labor. Obstetric operations are principally to be taught upon the phantom.

ABDOMINAL DIAGNOSIS.—Dr. E. E. Montgomery, Professor of Gynecology in the Jefferson Med. College, is reported in the Medical and Surgical Reporter as follows: "In order to arrive at a definite diagnosis of the character of any

growth and the organs by which it is affected, we mark out the abdominal surface by arbitrary lines into a number of spaces; thus we draw a line across the level of the eight rib, another at the level of the highest point of the crest of the ilia. These lines divide the abdomen into three spaces; these are subdivided by a perpendicular line dissecting Poupart's ligament, which consequently divides the abdomen into nine spaces, from above and to the right and left hypochondriac and the hypogastric, and the right and left lumbar and umbilical, the right and left iliac and the hypogastric regions. In each of these divisions of the abdomen we recognize there are situated portions of different viscera. On the right above we have the upper part of the liver, the right kidney, the ascending colon, and on the left the spleen, the left kidney, the descending colon. In the epigastric region we have the stomach, the left lobe of the liver and the gall-bladder. We also have the colon, the small intestine, and in the lower portion of the abdomen in the hypogastric region we have the uterus and bladder, and on either side the ovaries and posteriorly the rectum. In the right lumbar region distensions may arise as a result of inflammation about the appendix or caecum. In addition to the conditions named we may have enlargement of the abdomen from the presence of growths in the mesentery and omentum or from retro-peritoneal tumors. If a patient, then, presents herself suffering from an abdominal tumor, we endeavor by inspection and palpation to determine the portion of the abdomen in which it is directly situated. Having determined this, we take into consideration the viscera of that region and endeavor by a process of elimination to satisfy ourselves as to the particular portion of viscus involved.

The methods by which we examine a patient may be divided into inspection, palpation, percussion, auscultation and exploratory incision. By inspection we recognize any irregularity in the abdomen, the part in which it is situated, discolorations of the cervix, cicatrices or striae. These striae are frequent in pregnancy. Rarely does a woman attain to the full term without more or less of such phenomena present. While this is considered as one of the signs of pregnancy, it should be kept in mind that it is not a result of pregnancy alone, but of any condition which causes sufficient distention of the surface to bring about such a change in the skin. It may result from ovarian or fibroid tumors, from a distention from ascites or obesity. The discolorations of the skin should be noted. These are more marked in the brunette, less so in the blonde. Pigmentation in the skin in some cases is very extensive. These discolorations also are not confined to pregnancy. In a woman who has been pregnant we frequently find a dark line known as the linea nigra, running from the umbilicus to the symphysis, in some cases even extending to the xiphoid appendix. We also find more or less discolorations of the skin on either side. These discolorations take place in other distentions of the abdomen, as ovarian disease and uterine growths, and are in particular characteristic of some forms of amenorrhoea.

HORSE HAIR SUTURE.—Dr. C. M. Daniels (Journal American Medical Association) says: "And now a word relative to the preparation of horse hair for surgical use. The convenience of the stable places it in every surgeon's hands and the hair needs only a thorough washing with soap and water, then for two or three days in 1 to 1000 hydrarg. bichlor. solution and transfered to 95 per cent. alcohol until used. I believe that when this material is more generally used and appreciated that surgical supply houses will

place it upon the market, and I have already made such suggestion to one of them and without hope of future reward.

SUGAR IN THE TREATMENT OF UTERINE INERTIA DURING LABOR.—It remained for Mr. Bossi, of Genes (*Rev. Illust. Polytechnique Medicale*), to make practical application of a theory propounded by Drs. Paoletti and Mosso, that sugar taken internally might be found to exhibit as stimulating an effect upon the group of uterine muscles as it has on voluntary muscles. Bossi administered a dose corresponding to an ounce of sugar in about eight ounces of water. A most excellent effect was observed after the first dose in all but one of the cases, the ecbolic action showing itself in from twenty to forty minutes and nearly always lasting till the birth of the child. In the other case a second dose had to be given. The contractions were always quite regular and free from any tetanic tendency.

EYE, EAR, NOSE AND THROAT.

UNDER THE DIRECTION OF W. D. BABCOCK, A.M., M.D., PROFESSOR OF DISEASES OF THE NOSE AND THROAT, COLLEGE OF MEDICINE OF THE UNIVERSITY OF SOUTHERN CALIFORNIA.

EXOPHTHALMIC GOITRE.—(Rev. Genl. Oph., January, 1895.) Chibert. Salicylate of soda has been used by Chibert in four cases of Baselow's disease with fair success. Dr. C. gives about seventy-five grains a day, and increases this in some cases. Improvement follows in a few days. The drug should be continued for a long time, unless there are contra-indications.

MUSCULAR ADVANCEMENT IN STRABISMUS.—(Oph. Rev., December, 1894.) Williams recommends advancement with or without tenotomy of the antagonist. He makes a horizontal incision in the conjunctiva, seizing the tendon on the hook, then passes the thread in the conjunctiva, to traverse the tendon perpendicularly, and finally brings it out in the conjunctiva in the neighborhood of the cornea. The tendon is then cut at its insertion and the threads are given to an assistant, while the operator performs a tenotomy of the antagonist; the threads are carefully tied. When through, the eye should appear to deviate in an opposite direction from the primary deviation, otherwise the effect will be insufficient.

BLEPHARITIS AND AMETROPIA.—(Oph. Rev., November, 1894.) Clark, from his statistical researches, made at the London Oph. Hospital, concludes that blepharitis is essentially a disease of childhood, and that when seen in adults it has lasted since childhood. It is the expression of asthenopia, caused by ametropia in every case. In one hundred cases he found only one emmetropic (normal) eye. Correction of the ametropia is an important point in the treatment of blepharitis. Local treatment is of advantage, but recurrences are the rule if the ametropia is not corrected by glasses.

(The above has been the teaching of the American ophthalmologists for years.—B.)

HEADACHES.—(Am. Jour. Ophth.) Landman: Migraine is only rarely caused by error of refraction, even when it is accompanied by this. It is especially uninterrupted headache which is caused by some ocular defect. Uninterrupted diffuse headache is usually caused by a general disturbance. If the patient complains of headache in the eyes or of pain extending from the eyeballs to the head, or surrounding the eyes after work, or situated behind the eyeballs, or of exasperated attacks in the evening in general, of

painful symptoms yielding to repose, it is probable that the cause resides in the eyes. He thinks that it is refraction, and not a lack of equilibrium of the motor muscles of the eye, which causes headache. Two hundred cases of headache present the following subdivisions of localization: Eyebrows, 41 per cent.; top of head, 20 per cent.; occipital, 12 per cent.; occipital frontal, 8 per cent.; temporal, 8 per cent. In one case the headache was general. The forehead and vertex, the occiput and vertex, were each thirteen times the seat of pain. Occipital headache was frequently accompanied with stiffness of the nape of the neck.

PURULENT OPHTHALMIA.—(Ann'l. d'Ocl., February, 1895.) Fromaget: He uses formal as a wash, 1 to 2000, carefully bathing the palpebral and bulbar conjunctiva; then he drops in a few drops of a 1 to 200 solution. This is done four times daily. He claims formal is sufficient to cure ophthalmia in the new-born. It is not painful, and can be used without danger where there is ulceration. Nitrate of silver still remains with him the leading antiseptic in purulent ophthalmia, in a solution of 1 to 30. For every microbial affection, two aims must be realized: the destruction of the infectious agent and the defertilization of the media where it lives, to prevent those which have escaped the action of the microbide from living and multiplying. Nitrate of silver is the best microbicide; formal is a most excellent defertilizer. It is on this account the proper agent to complete the therapeutic work.

SCOPOLAMINE HYDROBROMATE IN INCREASED OCULAR TENSION.—(Jour. Oph. Otol. and Laryng., January, 1895.) Ritchie thinks that we have in scopolamine a mydriatic that will dilate the pupil and at the same time reduce the tension of the eyeball. He has used it with success in irido-cyclitis, glaucoma simplex and parenchymatous keratitis, complicated with rheumatism. In all these cases eserine had been used, but the scopolamine gave the most relief.

CORRESPONDENCE.

LICENTIATES OF THE CALIFORNIA STATE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners of the Medical Society of the State of California, held March 13, 1895, the following certificates were granted:

Coe, Henry W., 4001, Portland Oregon, Long Island College Hospital, N. Y., June 23, 1880.
Coe, Viola M., 4002, Portland, Oregon, Woman's Medical College, Chicago, Ill., April 1, 1890.
Daniel, William G., 4003, (2d Certificate) San Bernardino, Nashville Medical College, Tennessee, March, 2, 1857.
Hauber, Chas. A., 4004, Alvarado, Cooper Medical College, Cal., December 6, 1894.
Heald, George H., 4005, St. Helena, Cooper Medical College, Cal., December 7, 1893.
Jensen, Johan L., 4006, Stanwood, Washington, Rush Medical College, Illinois March 29, 1892.
Kellog, Donald A., 4007, Artesia, Bellevue Hospital Medical College, N. Y., March 11, 1889.
Masser, Wm. H., 4008, Los Angeles, Medical Department University Pennsylvania, March 15, 1880.
McCauley, Samuel D., 4009, San Francisco, Medical Dept. Willamette University, March 4, 1867.
New, Richard B., 4010, Los Angeles, Kentucky School of Medicine, Kentucky, June 22, 1886.
Parent, R. Arlington, 4011, Woodland, Washington, Baltimore Medical College, March 11, 1889.
Payton, J. E., 4012, San Jose, Medical Department Willamette University, Oregon, June 12, 1877.
Peirounet, F. M., 4013, Los Angeles, College Phys. and Surgery, St. Louis, Mo., March 10, 1887.
Steade, James M., 4014, San Diego, Cincinnatti College of Medicine and Surgery, Ohio, April 3, 1894.
Tiffany, Edward V., 4015, Plymouth, Medical Department University of California, Nov. 20, 1894.
April 2, 1895.
Beckman, Oswald H., 4016, Astoria, Or., Jefferson Medical College, Penn., March 29, 1884.
Beebe, W. L., 4017, Los Angeles, Medical College of Ohio, March, 1873; Bellevue Hospital Medical College, New York, March 1, 1876.
Benner, S. M., 4018, Monterey, Rush Medical College, Illinois, Feb. 25, 1879.
Benton, John M., 4019, San Francisco, Medical Department University Maryland, April 16, 1890.
Calder, James S., 4020, Los Angeles, Harvard Medical College, Mass., March 7, 1866.
Christal, J. F., 4021, (lieu certificate) Santa Cruz, Cooper Medical College, Cal., Dec. 4, 1891.
Ellis, Samuel A., 4022, Los Angeles, College Physicians and Surgeons, Chicago, Feb, 23, 1886.
Grossman, E. L., 4023, San Francisco, Cooper Medical College, Cal., Dec. 6, 1894.
Johnson, F. F., 4024, San Francisco, Cooper Medical College, Cal., Dec. 6. 1894.
McLean, Duncan, 4025, Sacramento, University Toronto, Canada, May 6, 1891.
Nicholson, Albert R., 4026, Los Angeles, Medical Dept. University Michigan, June 26, 1879.
Quevli, C., 4027, Tacoma, Wash., Minnesota Hospital College, Minnesota, February 27, 1885.
Tucker, W. G., 4028, San Francisco, Medical Department University Michigan, June 29, 1893.
Ware, Charles Daniel, 4029, Colfax, Medical College of Ohio, March 7, 1888
Werber, Gustavus E., 4030, Los Angeles, Columbian University, D. C., May 5, 1894.
Zudzense, 4031, Los Angeles, Rush Medical College Illinois, March 31, 1891.

Chas. C. Wadsworth, M. D., Secretary.

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EDITORIAL.

SERO-THERAPY.

Behrung's Heil-serum has now been in use for somewhat more than a year. At this writing the award of the French prize for the discovery of a diphtheria specific has not been made, nor has Behrung as yet received the decoration of the Legion of Honor. A growing disposition is observable among the French to assign to their countryman, Roux, whatever credit may attach to its discovery. As to the merits of the difference, we are too remote for an opinion. Meanwhile, interest increases in the applicability and possible specificity of the remedy itself with the steady accumulation of reports from all directions. It is much in its favor that, after positive antagonism, Virchow has abandoned his opposition, and has admitted the reasonableness of the treatment. Vierordt, who stands well toward the front in the esteem of thoughtful American physicians, is more and more inclined to believe in the specific action of the serum, although he says "it must be some time before the value of the method can be absolutely proved." After employing it in seventy-five (consecutive) cases, eight of which were moribund on coming under observation, the mortality was but 25 per cent., as compared with a percentage of 67 during the preceding six years. Deducting the moribund, the percentage was lowered to 14, as against 37 during the period named. He concludes that no remote harmful effect was produced by the serum; and he asserts that "its use is imperative." So far as we are able to determine, no other treatment was used, except tracheotomy in laryngeal involvement.

Fuerst, in a carefully-written article in the *Berlin Klinik*, of last month, concludes that the serum treatment is of use (only) when the diphtheritic process is not limited to the site of invasion, and when local treatment is impossible. Its drawbacks are its uselessness (1) in septic secondary infections, and (2) in diphtheria of the bronchi, and that (3) there is danger of certain possible after-effects. Local treatment, he insists, should never be neglected.

In reports gathered from American journals, we note the disposition to combine the serum treatment with any favorite former method peculiar to the reporter. This, in accordance with Fuerst's ideas, can never be productive of any proper estimate of the value of the new remedy.

The serum has been used in this city for several months, but the number of observations is as yet not sufficiently large to furnish a basis for satisfactory conclusion. However, the comparative results have been encouraging. Physicians here, as elsewhere, have now to overcome the prejudice against its use, resulting from the reported death of a patient in Brooklyn, following sufficiently close upon its administration to warrant the popular mind in holding the serum responsible. The coroner exonerated both the serum and the doctor. It is to be regretted, however, that no part of the contents of the bottle used remained for analysis, and that no independent autopsic lesion was found to which the unexpected result might be attributed. We incline to believe that the substance employed caused the patient's death. That it was genuine recent Heil-serum we seriously doubt.

The accident—or incident—painfully demonstrates the helplessness of the physician, and his utter dependence upon the conscience and skill of the unknown man behind a guarantee label. While this is no new phase of experience—the difficulty with reference to pure drugs having always existed—the possibility of certain *uncertain* after-effects renders somewhat disquieting the lack of positive knowledge as to what lies beneath the label. The discussion of the question of commercialization, or of municipal, State, or governmental control of therapeutic agents would lead us wide of our purpose. If we use the serum we must take our chances, exercising reasonable precautions, as we have for many years done with bovine vaccine virus, hoping that neither accident nor intention may menace us with the unexpected, which, unfortunately, so often happens. As to its specific merits, or its merits as a specific, the Behrung's serum must for an indefinite time longer continue *sub judice*.

Meanwhile, attention is being directed with a measure of hopefulness to immunized equine serum in the treatment of tuberculosis, as announced by Dr. Paul Paquin of St. Louis, Mo. The process of immunization as yet he holds a secret, not, we choose to believe, for personal advantage, but for the further improvement of the method, and the avoidance of probable speculative commercial cupidity, and possible adulteration or substitution. We doubt not that in the early future this most recent and hopeful claimant to medical confidence, surounded by efficient safeguards, will be freed from the incubus of mystery.

The observer claims that,—

(1.) Sero-therapy in tuberculosis has so far proved efficacious.

(2.) Blood serum from the horse seems naturally antagonistic to the germs of tuberculosis.

(3.) It may be rendered more strongly antagonistic by a proper technique.

(4.) A horse subjected to this process for three months may yield serum of

sufficient immunizing power to arrest tuberculosis in the first stage in three or four months, and sometimes less; and in the second stage in from four to twelve months.

(5.) Sero-therapy with appropriate adjunct treatment promises better results than any other method.

He concludes: "I do not designate this serum as a *cure* or a *specific*, but a valuable new remedy."

These, and other like investigations, we are persuaded, are in the general direction of the truth. Scientific enthusiasm, tempered by rational caution and the subjugation of a disposition to make results correspond to preconceptions, may be safely trusted. Its hopeful predictions should not be given the lie in advance, nor its announced results too readily attributed to other causes.

RADICAL CONSERVATISM.

We are again on the eve of the annual session of the American Medical Association. Its refusal last year to revise the code of ethics occasioned no surprise on this coast, or elsewhere, among those acquainted with its *personnel*.

Although advocating revision of a practical character, we are free to express our satisfaction at the rejection of the unsatisfactory substitute offered.

The association claims to be a representative body, but is so, if at all, with great irregularity.

It simulates more nearly a body of medical politicians, in the modern, and not the best, sense of the word. The rich treats given to us by the men of ability who contribute to its program seem but incidental to the schemes of aspirants for personal preferment, and the purposes of those who make the occasion an opportunity for a good time generally. This fact has, without doubt, been a potent causative element in the establishment of such organizations as the Association of American Physicians, the Association of American Surgeons, the Association of American Gynecologists, *et cetera*, whose sole purpose is the advancement of the healing art.

While Americans are proverbially irreverent, the balance of power in social matters, as a rule, is held by a few worshippers of the antique and the foreign. Whether the sentiment of worship is maintained towards the code because of its English origin, or because of its antiquity—as a new country may speak of antiquity—is a matter of uncertainty, yet not of improbability.

The code enjoins reverence for our elders; but it has no authority to demand obeisance. The desire to manifest this reverence is doubtless the basis of the radical conservatism that clings to the dead letter of an impracticable and obsolete form, disobeyed in the spirit by its staunchest supporters, more than in the letter by men as true who seek something practicable and adapted to the requirements of the present.

Principles do not change; and we should be sorry to have eliminated the few that have been so long buried beneath the ungrammatical verbiage of the Percival code.

But the application of principles may vary with varying conditions. As well demand of the practitioner of today the treatment of disease according to the routine of fifty years ago, as to enforce the observance of so-called ethical rules quite as antiquated. To the honorable physician who bases his

conduct on *The Golden Rule*, no written code can be either a help or a hindrance; while he who ignores this beautiful epitome of *meum* and *tuum* construction would stand in fear of nothing less than the penitentiary or of the general judgment. Since the Golden Rule is not likely soon to be introduced into the American Medical Association, we may as well content ourselves with the hope that the code may be reconstructed, a task quite possible, if difficult. However, let us have no unsightly patching.

"If it were done when 'tis done, then 'twere well
It were done quickly."

But we can better afford to wait indefinitely than to receive less than the consensus of the profession at large demands.

DRS. FITZGERALD, BICKNELL AND HITCHCOCK.

In addition to the regular course of lectures on Gynecology at the Medical College of the University of Southern California, the classs have had the privilege of listening to lectures on Perineorrhaphy by Dr. O. D. Fitzgerald; on "Uterine Displacements and Their Treatment" by Dr. F. T. Bicknell, and on "Electricity in Gynecology" by Dr. W. W. Hitchcock. These gentlemen having given special attention to the subjects embraced in their respective lectures, their kindness in acceding to the request to deliver these addresses was highly appreciated by the Seniors.

STATE MEDICAL SOCIETY.

The State Society did itself proud in voting to come to Los Angeles next year. In the words of our eloquent friend, Remondino, when he was elected president of the Southern California Medical Society, "the society ought to be congratulated on its selection." We think, judging from past experience, that the holding of the meeting here will be a complete success—numerically, financially and socially. Five years ago the session held in Los Angeles was a very profitable one, and at that time the city was just recovering from a bad attack of "boom;" now, with a large increase in the number of physicians, and in the size and material prosperity of the city, the profession cannot fail to entertain right royally their visitors from the North, furnish a large attendance upon the meetings and cause a goodly number of new members to be enrolled.

Another thing accomplished at San Francisco, which is especially pleasing to the members of the profession in the southern part of the State, was the selection of Dr. William Le Moyne Wills as president, and Dr. H. G. Brainerd as vice-president. Dr. Davisson of Los Angeles was also elected president of the State Board of Health, and Dr. C. L. Bard of Ventura, vice-president. Southern California was honored all around. We believe she will prove herself worthy by her actions next April.

MORBIDITY STATISTICS.

The Weather Bureau are attempting a new and very important investigation of the influence of climate on health. They are sending to the profession postal cards, on which the physician is to make a return of the prevalence of various diseases during the week. The department hopes to gather thereby *morbidity* statistics. These vital data will be compared with

the meteorologic conditions, and therefrom can be computed the effects of the changes in weather on the prevalence of disease.

As this will be general, no attempt can be made to favor a particular locality. A publication of the compiled facts will be issued monthly. It is earnestly to be hoped that the department will have the hearty co-operation of all physicians, and that the returns be as complete, accurate, and prompt as possible.

EDITORIAL NOTES.

We are sorry to learn of the serious illness of Dr. J. E. Cowles. Like so many other surgeons, he infected himself with erysipelas while in the discharge of his duties. We hope soon to learn of his full recovery.

Dr. J. Lee Hagadorn of Fullerton has joined the ranks of the benedicts. He was married March 29th to Miss Ethyl Priest. We never have been favorably impressed by preacher-doctors, but this combination of Priest and doctor meets our hearty approval.

April 1st the County Hospital staff was changed. Dr. D. C. Barber is now superintendent, and Dr. C. W. Murphy assistant physician. Both of these physicians are well known in Los Angeles, and both are connected with the Medical College. As they are enthusiastic pathologists, we hope for great things from them. Dr. Barber enters his new field of work with the hearty support of the profession, and we feel confident that his administration will be successful in all respects.

PAMPHLETS RECEIVED.

CONTUSION OF THE ABDOMEN, WITH RUPTURE OF THE THORACIC DUCT. By Thomas H. Manly, M.D., Visiting Surgeon to Harlem Hospital, New York. Reprinted from the Medical News, November 3, 1894.

A BLOODLESS OPERATION FOR HEMORRHOIDS. By the same author as the above. Reprinted from the Boston Medical and Surgical Journal of February 1, 1894.

THE PATHOLOGY, SYMPTOMOLOGY AND TREATMENT OF HEMORRHOIDS, SIMPLE AND COMPLICATED. By the same author as above. Reprinted from St. Louis Surgical Review, October 7, 1893.

REMOVAL OF THE HEAD OF THE FEMUR FROM THE LESSER SCIATIC NOTCH. By B. Merrill Ricketts, M.D., Cincinnati, Ohio. Reprinted from the Times and Register, December 15, 1894.

THE REMOVAL, BY TREPHINE, OF FLUID AS THE RESULT OF ACUTE CEREBRAL MENINGITIS, WITH REPORT OF A CASE. By the same author as above. From the Times and Register, December 8, 1894.

NEUDERFER'S METHOD OF AMPUTATING EXTREMITIES, WITH A REPORT OF TWO THIGH AMPUTATIONS. By A. H. Meisenbach, M.D., of St. Louis, Mo., Professor of Surgery in the Marion Sims College of Medicine. Reprinted from Annals of Surgery, August, 1894.

THE PROFESSION OF MEDICINE AS SKETCHED FROM THE OUTSIDE AND FROM THE INSIDE. By S. W. Kelley, Cleveland, Ohio. Reprinted from The Cleveland Medical Gazette, June, 1893.

FESTSCHRIFT ZUM FUENF UND ZWANZIG JACHRINGEN JUBILÆUM DES VEREINS DEUTSCHER AERZTE, zu San Francisco, Cal., 1869-1904,

VAGINAL EXTIRPATION OF THE UTERUS AND ADNEXA IN PELVIC SUPPURATION AND SEPTIC PUERPERAL METRITIS AND PERITONITIS. By H. J. Boldt, M.D., Professor of Gynecology at the New York Post-Graduate Medical School and Hospital, etc. Reprinted from The American Journal of Obstetrics and Diseases of Women and Children, Vol. XXXI, No. 1.

A Few Things that may add to the Convenience of Railroad Surgeons, with which is printed an article on Bloodless Amputation at the Hip Joint at One Sitting, and with One Needle. By Stewart Leroy McCurdy, M.D., Dennison, Ohio, Surgeon to P., C., C., and St. L. Ry., Professor Orthopedic Surgery in Ohio Medical University. Reprinted from The Railway Age and Northeastern Railroader, Chicago.

Throop Polytecnic Institute and Manual Training School. Supplement Number One to Catalogue of 1793-94. Pasadena, Cal., September. 1894.

Bladder Gymnastics and Auto-Irrigation. By Byron H. Daggett, M.D., Buffalo, N. Y. Reprinted from Buffalo Medical and Surgical Journal, July, 1894.

Lectures on Rectal and Gastro-Intestinal Surgery with Demonstrations. II. A Modification of Kraska's Method of Excision of the Rectum. III. A Tunneled Fistulatome. IV. Gastro-Enterostomy made within two minutes without Suture, Ligature or Forceps, with a Modification of the Murphy Button. By H. O. Walker, M.D., Detroit, Mich. Reprinted from Mathews' Medical Quarterly, July, 1894.

Tuberculosis in the Ano-Rectal Region. By Thomas R. Manley, M.D., Visiting Surgeon to Harlem Hospital, New York. Reprinted from The Medical Brief, St. Louis, Mo. 1894.

Cooper Medical College, San Francisco. Annual Announcement. Session of 1895.

Nicaraugua Maritime Canal. Speech of John H. Mitchell, of Oregon, in the Senate of the United States, Monday, January 7, 1805. Washington. 1895.

Chicago Summer School of Medicine. Chicago, Ill. Spring and Summer Graduating Course Co-Educational. Regular session, opening March 6th and closing September 5th, 1895.

Hygiene of the Anus and Contiguous Parts. By J. Rawson Pennington, M.D., Chicago. Professor of Dermatology, Syphilology and Diseases of the Rectum in Chicago Summer of Medicine, etc. Reprinted from the Journal of the American Medical Association, January 43, '895.

BOOK REVIEWS.

A MANUAL OF BANDAGING, *Adapted for self-instruction.* By C. Henri Leonard, A. M, M. D., Professor of the Medical and Surgical Diseases of Women, and Clinical Gynæcology in the Detroit College of Medicine. Sixth edition, *with 139 engravings*. Cloth, octavo, 189 pages. Price $1.50. The Illustrated Medical Journal Co., Publishers, Detroit, Mich.

The main feature for commendation of this book over other similar works is that each illustration shows the direction of the various turns of the bandage with arrow-heads, and each turn is properly numbered; this renders the book a self-instructor to the reader of it, who has but to put the various bandages about the limbs of an office companion a few times, when the "trick" of its application upon a patient has been learned. It takes the place, in this way, of hospital drill. Besides the "Roller Bandages," the various Ts "Cravats," "Slings," "Tailed," "Adhesive" and "Plaster" bandages, and "Immovable Dressings" are given. The book is divided into sections treating of "The Bandages of the Head," of "the Body," of "The Upper Extremity," of "The Lower Extremity," "Knots," "Strappings," "Compresses" and "Poultices," with full description of making and applying the same. There is an illustration for nearly every bandage described. It has been recommended as a text book in various colleges and hospitals in this country, and has had two editions sold abroad. A medical student could profitably spend his vacation evenings in mastering the application of bandages by using this book as a guide; and to a practitioner it would not come amiss.

MANUAL OF GENERAL MEDICINAL TECHNOLOGY, INCLUDING PRESCRIPTION WRITING. By EDWARD CURTIS, A. M., M, D., Emeritus Professor of Materia Medica and Therapeutics, College of Physicians and Surgeons, Medical Department of Columbia College, in the city of New York. Third Edition, conforming to the U. S. Pharmacopœia of 1890. Pocket Size (Wood's Pocket Manual Series), 245 pages. Price $1.00.

This little book is a gem. That feature which especially pleased the reviewer is the method of describing how to use Latin in prescription writing. The reviewer has spent ten years of his life as a student and instructor in Latin, and he must admit all the practical worth of it as far as prescription writing is concerned is found in a hundred pages devoted to the subject. Any one without a teacher can master Medical Latin with this little work. It gives only what is needed, it gives just what is wanted, and in such a manner as to both please and instruct. Students and non-classical physicians can spend a dollar with great profit to themselves by having this little pocket manual.

SYLLABUS OF GYNÆCOLOGY BASED ON THE AMERICAN TEXT BOOK OF GYNÆCOLOGY. By J. W. LONG, M. D.. Richmond, Professor of Gynæcology and Pediatics in the Medical College of Virginia, etc. Philadelphia, 1895; W. B. Saunders, 925 Walnut Street. Price $1.00.

The author states he has written this syllabus with a three-fold object: first, to be used as lecture notes; secondly, to enable the student more intelligently to follow and remember the lecture; and finally, as a convenient reference for practitioners. It is interleaved for additional notes if desired. Note-taking during lecture hours is a bad practice—the student's entire energy should be given to fully understand the lecture, and not wasted in taking scanty or illegible notes. Yet he wishes to remember what has been said. A good syllabus enables the listener to pay attention closely, for he knows he will have the full thing in a nut shell in tabular form. We are very favorably impressed with this class of books, especially those based on so standard a work as is this one.

LABORATORY GUIDE FOR THE BACTERIOLOGIST. By LANGDON FROTHINGHAM, M. D. V., Assistant in Bacteriology and Veterinary Science Sheffield Scientific School, Yale University. Illustrated. Philadelphia, 1895; W. B. Saunders. Price 75 cents.

Those who wish this book will surely get it, all that see it wish it; that is, all who do any bacteriological work at all, for it is concise, exact, arranged for notes, and adapted for actual work. Any one expecting to do this kind of work ought to have this guide. Medical students and practitioners will find this an excellent working companion.

SEXUAL NEURASTHENIA [NERVOUS EXHAUSTION] ITS HYGIENIC CAUSES, SYMPTOMS AND TREATMENT, WITH A CHAPTER ON DIET FOR THE NERVOUS. By GEO. M. BEARD, A. M., M. D., formerly Lecturer on Nervous Diseases in the University of the City of New York, etc. Edited with notes and additions by A. D. RANDALL, A. M., M. D. Fourth edition—with formulas. New York, 1895. E. B. Treat, 5 Cooper Union. Price $2.75.

This book is one meant for the medical professor, and unlike a similar work, Psychopathia Sexualis, so treats of the subject as to be used by the professor alone. Several important stands are taken on various questions, some of them contrary to commonly received opinion. One of the most marked exceptions to the ordinary acceptation is the fact that true spermatorrhœa is of very frequent occurence in neurasthenia. He puts in a very seasonable objection to the habit of naming diseases from products that appear in the urine, the presence of excess of phosphates, oxalates, uric acid, etc., being merely incidents in the diseases. He finds an excess of these solids in most cases of neurasthenia.

He also is quite opposed to naming any trouble from some prominent symptom. A typical case of neurasthenia can easily be taken for some 50 other complaints. He has a great antipathy to denominating obscure nervous troubles in the male hypochondria—he thinks that that diagnosis has been a convenient term to apply to them just as hysteria has been the favorite catch-all for nervous troubles of women. A large majority of such cases in men he now ascribes to neurasthenia of sexual origin. He would by no means be understood as claiming that neurasthenia is always the result of some functional or other defect in the genital system, but such conditions are so often the basis of abnormal mental states that he thinks the subject worthy of discussion in a separate book.

He deals not so much with the moral pervert like the murderer of the unfortunate girls in San Francisco lately, as with those cases presenting abnormal vices from which they themselves wish to be free. In spite of the disagreeable subject the moral tone of the book is good—nowhere advising the commission of sin for the curing of fancied or real physical evils. One can not help noticing with pleasure that an American author differs widely in this respect from some of the writers on the other side of the Atlantic.

NOTES ON THE NEWER REMEDIES, THEIR THERAPEUTIC APPLICATIONS AND MODES OF APPLICATION. By DAVID CERNA, M. D., Ph. D., Demonstrator of Physiology and Lecturer on the History of Medicine in the Medical Department of the University of Texas, etc. Second Edition, enlarged and revised. Philadelphia, 1894. W. B. Saunders, 925 Walnut Street. Price $1.25.

This little book gives the most salient points of all the newer remedies arranged in alphabetical form. In 1893 the author wrote his first edition—making it then a sort of an appendix to standard works. The rapid advance of therapeutics compels him to rewrite his work and make many new additions. Besides keeping step with the newer remedies, he adds short paragraphs on the physiological action, toxicology, and incompatibility and contraindications of the drugs under discussion. This last adds not a little to the general value of the book. One of the most striking changes from the first edition is a well arranged index of diseases, which cannot fail to be useful to the practitioner. The book was good before; it is now better in all respects.

SUGGESTIVE THERAPEUTICS IN PSYCHOPATHIA SEXUALIS; WITH ESPECIAL REFERENCE TO CONTRARY SEXUAL INSTINCT. By DR. A. VON SCHRENCK-NOTZING (Munich, Germany). Authorized translation from the German by CHARLES GILBERT CHADDOCK, M. D., Professor of Diseases of the Nervous System, Marion-Sims College of Medicine, St. Louis; member of the American Medico-Psychological Association; Attending Neurologist to the Rebekah Hospital, St. Louis, Mo., etc., etc. One volume, royal octavo, 325 pages. Extra cloth, $2.50 net; sheep, $3.50 net. Sold only by subscription to the medical profession exclusively. Philadelphia. The F. A. Davis Co., Publishers, 1914 and 1916 Cherry Street.

Those who have Kraft-Ebing's Psychopathia Sexualis ought also to buy this book as a companion to it. The laity as well as the profession to a large degree bought the former work. This one will not find so extensive a sale, for it treats of the treatment of sexual abnormalities. Many of the moral perverts who delight to read that part of medical literature alone which discusses sexual matters are not desirous of being cured, and hence will not be so apt to read this volume. As much of the abnormalities observed in sexual matters are the result of psychical conditions, it seems reasonable to suppose that hypnotic suggestion might have considerable weight in their treatment.

Psychical conditions in general—abnormal moods, feelings, instincts, ideas, and even hallucinations can be removed by hypnotism. And under this

head falls the peculiarly disgusting contrary sexual instinct—amenable, the author claims, to hypnotic suggestion. We doubt if the Oscar Wilde's of this world are worth saving; but, if they apply to the physician, we presume it is his duty to effect a cure if possible. The tone of morals, as evidenced by the cases cited, reminds one of ancient Sodom or modern London. The author himself favors the mechanical prevention of conception.

The author makes a collection of 8705 persons who have been either hypnotised or treated by hypnotism, and only 6 per cent. were refractory, the other 94 per cent. succumbing to the various stages of hypnosis. The book is an interesting contribution to that department of medical literature, and despite its unsavory topics ought to be perused by both physician and jurist.

ANTISEPSIS AND ANTISEPTICS. By CHARLES MILTON BUCHANAN, M. D., Professor of Toxicology and Metallurgy, National University, Washington, D C., with an introduction by PROF. AUGUSTUS C. BERNAYS. The Terliene Company, Publishers of Medical Books. Newark, N. J., 1895. Price $1.25.

One of the most pronounced features of this book is the insisting that bichloride of mercury is not a germicide, but a good preventive. It makes against it the following counts (p. 141):

1. It is exceedingly poisonous.
2. It corrodes all of the common metals.
3. It causes superficial necrosis when brought in contact with living tissue.
4. It unites with albuminous substances, forming an insoluble, inert compound.
5. It owes its virtue entirely to the prevention of germ development.
6. If left in contact with organic matter it soon decomposes.

It favors moist heat for sterilization of instruments, dressings, etc. It recommends thorough washing in soap and hot water, then soaking in saturated solutions of permanganate of potassium and oxalate of calcium for hands of the operator and assistants. It suggests the boiling of instruments in one per cent. aqueous solution of soda.

It condemns a ligature in aseptic wounds, also of coarse drainage, and speaks highly of dry pulverent dressings.

It goes into minute details, and gives at the end a summary of the usages of leading surgeons as to antiseptic procedures.

THE INTERNATIONAL MEDICAL ANNUAL AND PRACTITIONER'S INDEX. A Work of Reference for Medical Practitioners. 1895. Thirteenth year. New York: E. B. Treat, 5 Cooper Union. Chicago: 199 Clark Street. Price $2.75

This Annual keeps up its reputation of being the best single volume condensation of medical progress that is published. As the editors claim the greatest trouble is to keep the material down to the proper amount. The plan pursued is the one familiar to the patrons of the Annual—a concise statement of the new treatments in vogue during the past year; also a synopsis of the previous management as laid down in former Annuals. These brief synopses add not a little to the usefulness and value of the Annual, as a reference to the latest edition gives an epitomization of the work of former numbers.

One of the longest articles is on the Treatment of Diphtheria by Anti-toxic Serum, by M. Armand Ruffer, M. A., M. D. His conclusions are that antitoxine effects, firstly a lessening in the amount of membrane secondly a notable fall in the pulse rate, thirdly an improvement in the general condition of the patient, and fourthly a fall in temperature in cases where the temperature had been raised. His experience is decidedly in favor of the use of anti-toxine —and as all observers have agreed that to obtain satisfactory results it should be exhibited as early as possible in the disease.

A finely illustrated article is the one on Idiocy, by Dr. G. E. Shuttleworth The thyroid treatment of cretinism receives special attention from him.

Under Eyesight and School Life Snell has a great deal to say. He approves among other things vertical instead of slanting penmanship. Cancer is a subject which occupies considerable room. The conclusions as to the use of Erysipelas toxines is as follows: "Of little use in gland carcinoma, beneficial to a slight extent in epithelioma, and of great benefit in sarcoma, especially when the growth is situated in soft tissues."

In the general review previous to the especial treatment of separate subjects, there occurs a very important statement: "The main difficulty which appears to stand in the way of our being able to adapt our therapeutic agents to our physiological principles is that we do not *think* in physiological terms. We speak of nervous excitement as if it were due to an increase of nervous energy, whereas, physiologically, it is due to a diminution of nervous power." And hence we often give bromide when some nerve tonic is needed.

The Annual still adheres to its former sensible remarks on organic extracts —the symptoms produced by the so-called cerebrine, for instance being those of nitroglycerine. The use of nitroglycerine, 1 drop of 1 per cent. solution to prevent the unfavorable effects from cocaine is mentioned.

It would be useless to go through the work and mention the subjects in detail. The reviewer has merely picked out a few points here and there to show the general make-up, careful judgment and wide scope of the Annual. Those who have the previous numbers will probably purchase this also, and any one who desires a really good condensation at a reasonable price, can not do better than send for the Annual at once.

The April number of the Overland Monthly is its spring number, but that does not mean that the spring poet has been given full swing in its pages. There are light articles, sketches and stories in abundance, nevertheless. "Baboo's Pirates," a tale breathing the tropical spirit of the Malay jungle, from the hand of the editor, Rounsevelle Wildman, whose style in these sketches is becoming too well known to need commendation. Varner Z. Reed contributes "Lo-To-Kah and the Golden Woman," another of his close studies of the better side of Indian nature. These Utes and Navajos are as far from Cooper's noble red man as they are from the degraded loafer about Western railway stations. In the "True Tales of the Old West" Series, S. S. Boynton tells of the exciting pursuit of a mining camp murderer. "The Coming of the River Piura" is a pretty picture of a curious Peruvian custom of welcoming with a great public demonstration the coming of the life-giving water to the dried-up river bed. "Pampas Grass and Pomegranate" shows the possibilities contained in these two of California's peculiar cultures. The more solid articles of the number are "The Jew in San Francisco" by Rabbi G. A. Danziger, from the Hebrew's point of view, and by Mrs. K. M. Nesfield, from the Gentile standpoint, a long and fully illustrated article,—it is curious to see where the two views agree and disagree: "The Bible and Divorce" is a plea by E. H. B.,—who, it is said, is a leading business man of San Francisco, for greater liberality in interpretation of scriptural utterances on divorce, and a rejoinder by Rev. W. W. Bolton, rector of St. Mary the Virgin. Besides these is the usual variety of poems, stories and sketches, book reviews, editorials, and the entertaining "As Talked in the Sanctum."

MONTHLY METEOROLOGICAL SUMMARY.

U. S. WEATHER BUREAU, LOS ANGELES STATION.

Los Angeles, California. *Month of March, 1895.*

Date	TEMPERATURE Max.	Min.	Mean	Precipitation in inches and hundredths
1	82	41	64	0
2	73	49	61	0
3	70	47	58	0
4	73	46	60	0
5	66	45	56	0
6	62	48	55	0
7	66	43	54	0
8	64	52	58	T
9	60	52	56	0
10	65	51	58	0
11	60	48	54	T
12	61	48	54	0
13	52	46	49	.89
14	56	39	48	.03
15	59	38	48	0
16	68	39	54	0
17	56	42	49	.08
18	58	42	50	.31
19	62	42	52	0
20	62	39	50	T
21	64	44	54	T
22	65	42	54	0
23	67	42	54	0
24	76	44	60	0
25	84	50	67	0
26	75	53	64	0
27	62	54	58	92
28	60	51	56	1.54
29	61	46	54	0
30	66	41	54	0
31	72	44	58	0

SUMMARY

MONTHLY RANGE OF BAROMETER:

Mean Barometer, 30.04.
Highest barometer, 30.22, date 19.
Lowest barometer, 29.85, date 13.
Mean Temperature, 56°.
Highest temperature 84°, date 25.
Lowest temperature 38°, date 15.
Greatest daily range of temperature 35°, date 1.
Least daily range of temperature 6°, date 13.

MEAN TEMPERATURE FOR THIS MONTH IN

1877	..	1883	58°	1889	59°
1878	57°	1884	56°	1890	58°
1879	59°	1885	62°	1891	58°
1880	52°	1886	55°	1892	56°
1881	57°	1887	60°	1893	54°
1882	56°	1888	56°	1894	54°
				1895	56°

Mean temperature for this month for 17 years, 57°
Total deficiency in temp. during the month, ..°
Total deficiency in temp. since Jan. 1, 29°
Prevailing direction of wind, West.
Total movement of wind, 2650 miles.
Maximum velocity of wind, direction, and date, 20m, N.W., 29th.
Total Precipitation, 3.77 inches.
Number of days on which .01 inch or more of precipitation fell, 6.

TOTAL PRECIPITATION FOR THIS MONTH IN

1878	2.57	1884	12.36	1890	.66
1879	.49	1885	.01	1891	.41
1880	1.45	1886	2.52	1892	3.39
1881	1.66	1887	29	1893	8.52
1882	2.66	1888	3.17	1894	.37
1883	2.87	1889	6.48.	1895	3.77

Average precip'n for this month for 17 years, 2.96.
Total excess in precip'n during month .91.
Total precip'n from Sept. 1,'94, to date, 15.44 inch.
Averge precip'n from Sept. 1,'94, to date, ..inch.
Total deficiency from Sept. 1,'94, to date, .66 in.
Average rainfall for 10 wet seasons, 21.58 inches.
Number of clear days, 11.
" partly cloudy days, 9.
" cloudy days, 11.

NOTE—Barometer reduced to sea level. "T" indicates trace of precipitation.

METEOROLOGICAL SUMMARY SOUTHERN CAL., MARCH, 1895.

STATIONS	TEMPERATURE Mean	Max.	Min.	Mean Barometer	Relative Humidity	RAINFALL Days	Am't	WEATHER Clear	Fair	Cld'y	WIND Direction	Total Mov't
Los Angeles	56.	84.	38	30.04	77.	6	3.77	11	9	11	W	2,650
San Diego	55.	74.	38.	30.05	...	9	1.43	16	8	7	NW	3,978
Santa Barbara	53.6	78.	38.	...	75.	5	1.99	17	5	9	W	3,015
Yuma	64.	97.	38.	29 95	38.	0	T	22	8	1	W	5,590
Arlington Heighis	54.2	88.	31.	.....	.....	6	1.96	19	7	5	W	.....
Ontario	56.6	85.	40.	.....	.....	5	3.72	14	6	11	W	.....
Pasadena	54.5	82.	34.	.....	.....	5	4.27	....	....	...	SW	.....
Redlands	55.7	88.	39.	.....	.....	7	3.27	....	....	....	W	.....
San Bernardino	55.4	86.	33.	.....	72	5	3.44	12	15	4	W	.....
Santa Ana	56.7	82.	48.	.....	.....	....	2.95	..	.....	.....	S	.....

OBSERVERS.—George E. Franklin, U. S. Weather Bureau, Los Angeles; M. L. Hearne, U. S. Weather Bureau, San Diego; Hugh D. Vail, Santa Barbara; A. Ashenberger, U. S. Weather Bureau, Yuma. JAMES A. BARWICK, Director California Weather Service, Sacramento, Cal.

REGISTERED MORTALITY OF LOS ANGELES.

WITH SEX AND NATIVITY OF DECEDENTS.

Estimated Population, 75,000. *February, 1895.*

CAUSE OF DEATH	Total Deaths	Annual rate per 1000	SEX		NATIVITY				RACE		
			Male	Female	Los Angeles	Pacific Coast	Atlantic States	Foreign Born	Caucasian	African	Mongol
Deaths from all causes	81	12.96	52	29	13	11	33	24	74	4	3
Deaths under 5 years	10										
i. Specific infectious diseases	15		5	10	1	4	7	3	15		
ii. Diseases of digestive system	9		6	3	2		5	2	7	2	
iii. Diseases of respiratory system	22		16	6	4	2	6	10	20		2
iv. Diseases of nervous system	5		4	1	1		3	1	5		
v. Diseases of circulatory system, blood and ductless glands	8		6	2		1	3	4	8		
vi. Diseases of genito-urinary org'ns	2		1	1	1		1		2		
vii. Constitutional diseases	4		1	3		1	1	2	4		
viii. Intoxication, violence, accidents	10		10		2	1	5	2	8	1	1
ix. Miscellaneous diseases	6		3	3	2	2	2		5	1	
i. Septicæmia	1			1		1			1		
Pyæmia											
Diphtheria	2			2	1		1		2		
Erysipelas											
Typhus fever											
Typhoid fever	2		1	1		1		1	2		
Malarial fever											
Scarlet fever											
Measles											
Cerebro-spinal meningitis	1		1			1			1		
Smallpox											
Tuberculosis	9		3	6		1	6	2	9		
Influenza											
Dysentery											
Syphilis											
Tetanus											
ii. Diseases of the œsophagus											
Gastritis											
Gastro-enteritis											
Cholera infantum											
Enteritis	4		3	1	2		2		3	1	
Appendicitis											
Intestinal obstruction											
Diseases of liver	4		3	1			2	2	3	1	
Peritonitis	1			1			1			1	
iii. Membranous croup	2		1	1	2				2		
Bronchitis	3		3					3	2		1
Pneumonitis	1		1				1		1		
Pleuritis	1			1	1				1		
Phthisis	15		11	4	1	2	5	7	14		1
iv. Diseases of brain	5		4	1	1		3	1	5		
Diseases of spinal cord											
Eclampsia											
Epilepsy											
v. Diseases of heart	7		5	2		1	2	4	7		
Degeneration of arteries	1		1				1		1		
Aneurism											
Anaemia											
vi. Uraemia											
Acute Bright's disease											
Chronic Bright's disease	1			1			1		1		
Diseases of genital-organs	1		1		1				1		
vii. Rheumatism	3		1	2		1	1	1	3		
Gout											
Diabetes	1			1				1	1		
Inanition											
Senility and Asthenia											
viii. Alcoholism											
Opium habit											
Suicide	3		3		1		2		3		
Violence and accidents	7		7		1	1	3	2	5	1	1
ix. Tumors—malignant	2		2				2		2		
Tumors—non-malignant											
Other diseases	4		1	3	2	2			3	1	

F. W. Steddom, M D., Health Officer.

OUR ADVERTISERS.

AMERICA AND ENGLAND.

Agree in their good opinion of Angier's Petroleum Emulsion. Practical talk from practical physicians is always worthy of consideration, and we quote the opinions of the following physicians who have given Angier's Petroleum Emulsion a thorough practical test: Dr. S. C. Stoddard of Santa Barbara, Cal., says: "I am so pleased with Angier's Petroleum Emulsion that I am using it not only in consumption, but in all wasting diseases for which I formerly prescribed cod-liver oil. Since I have observed its wonderful effects in the conditions above indicated I have wholly abandoned the use of cod-liver oil. I have several case of phthisis and chronic bronchitis now under treatment with the emulsion, all improving rapidly. One case that six months ago seemed hopeless, having been pronounced so by several other physicians, now declares herself well. Your emulsion seems to have a necessity in my practice."

S. J. B. Caldwell, L.R.C.P., M.R.C.S., Liverpool, England, writes, under date of November 30, 1894: "Dr. Caldwell begs to state that he has taken Angier's Petroleum Emulsion with decided benefit in troublesome bronchial catarrh, and he is pleased to add his testimony to its great value as a tonic, and to endorse every word of the prospectus as to its effects and advantages over other emulsions of fatty medicines, generally so nauseating, but in this case positively pleasant to take and easy to digest."

Dr. J. F. T. Jenkins of Riverside, Cal., in a recent communication to us, speaks as follows of Angier's Petroleum Emulsion: "I have received the same good results with your Emulsion of Petroleum as mentioned by Dr. S. C. Stoddard of Santa Barbara. I am prescribing it exclusively in place of cod-liver oil, as results are obtained more promptly and are more pronounced in character. I expect to give a clinical report of some cases at the next meeting of our Medical Society."

Charles G. Bennett, M.D., M.B., C.M., of Buckie, N. B., England, writes as follows, under date of November 3, 1894: "I am certain that every one of the cases in which Angier's Petroleum Emulsion was used in my practice was benefited thereby. Two patients, who six months ago were suffering from incipient phthisis, and both of whom are members of families with tubercular histories, are now, as far as can be judged, restored to health and to work. Other two cases of phthisis, unfotunately far advanced and beyond hope of recovery, have had their few remaining days of life made more endurable and brighter by its use. A fifth case, referred to in my last letter, who was, at the date of letter, in a deplorable state of "broken-downness" from overwork, underfeeding and intestinal thready worms, is now barely recognizable, so greatly has he improved under the administration of Angier's Petroleum Emulsion. I egret that owing to an unusually heavy season's work, I have been unable to record in scientific fashion the details of these five cases, but I am resolved to make reliable records of at least a dozen cases under the treatment of your emulsion at as early a date as possible."

A SUBSTITUTE FOR COD-LIVER OIL.

In an article on the subject of Cod Liver Oil, which appeared in the *Pharmaceutical Era* for November, 1894, the author says:

"I find in my field of work that, at a conservative estimate, fully 98 per cent. of the physicians that I have interviewed on the subject of Cod Liver Oil claim that it produces digestive disturbances in from 60 to 80 per cent. of the cases which require its use."

Such a statement will not surprise those physicians who still cling to the use of this disagreeable drug. Cod Liver Oil is a relic of the days of powdered lizards' and snakes' eyes. It has retained its hold on the profession for the reason that an occasional patient is blessed with a stomach strong enough to tolerate its nauseating flavor; and under such conditions it is undeniably a fattening food. Increase of weight, however, is gained at a frightful expense when the health of the digestive organs has got to be sacrificed.

Starch is Nature's source of fat. Free oils were never designed for human food. Therefore, if you would fatten up your thin, anaemic patients, prescribe a hearty diet of starchy foods; and if they don't digest articles of this character to advantage, then give them Paskola, which is an artificially-digested starch, and which, by virtue of the presence in it of a small proportion of hydrochloric acid and meat-digesting ferments, aids the digestion of other foods in the stomach.

The manufacturers are anxious that the profession should become familiar with their product from actual experience, and therefore liberally offer to send a supply, express prepaid, to any physician who may request it.

You cannot make a mistake in prescribing Cod Liver Glycerine in all cases of doubtful or obscure diagnosis in cases of debility, feeble digestion, or loss of flesh and strength.

ENURESIS NOCTURNA.

Dr. F. Clark of Boston, Mass., writing says: "I have used *Sanmetto* with good results in bladder, kidney and urinary troubles. I had a man come to me from Philadelphia, Pa., who had been troubled from an infant up to the age of 24 years with nocturnal incontinence of urine—wetting the bed almost every night. I used three bottles of *Sanmetto* on him, and found it made a thorough cure. He can now go to bed at 8 o'clock and sleep until 8 the next morning without urinating. I recommend, with all honesty, to the suffering and to the profession, the great cure—*Sanmetto*."

The practitioner often comes in contact with women suffering with uterine troubles of an obscure character, accompanied by pains and aches, and a general feeling of lassitude and debility. In these cases Aletris Cordial is specially valuable.—*Chicago Med. Bulletin.*

The Maltine Manufacturing Company have issued a neat pamphlet on "Maltine and Coca Wine." It is the opinions of different writers in different medical journals gathered together in convenient form. It is well worth reading.

In the after-treatment of a case where an "Operation for the Relief of an Impermeable Occlusion of the Oesophagus of Five Years' Standing" had been performed, which operation was reported at length in the New York Medical Journal of March 23, 1895, Dr. Augustus C. Bernays, A.M., M.D., Heidelberg, M.R.C.S. Eng., Professor of Anatomy and Clinical Surgery at the Marion-Sims College of Medicine, the operating surgeon, says:

"The patient rallied fairly well after the operation, but she became greatly emaciated. Liquid food was given at short intervals and stimulants as indications demanded. In order to allay the extreme nervousness and irritability antikamnia was given and it acted promptly nd satisfactorily in every instance." .....

Of the further history of the case it may be stated that on the seventh day after operation, the patient took into her stomach through the natural channel the first food which had passed it in five years; and that in two months convalescence was regarded as fully established.

Walter W. S. Corry, M.D., L.R.C.S., I. & C., Rosedale Abbey, Pickering, Yorkshire, England, writes: "I have used Iodia, and am satisfied that it is a very powerful alterative, and a great improvement on the old combination of iodide of potassium and sarsaparilla, the latter drug itself being most doubtful in its effects, while the preparation is valuable also as a diuretic, a thing of no small consideration in most of the diseases in which it is indicated."

Walker Pharmacal Company, St. Louis, Mo.

Gentlemen: I received your sample of Pineoline some time ago, and I must say it is an elegant preparation, and that it cured my case of intractable Eczema, as nothing else did of the many medicaments which I have tried. GEO. H. GOODGER, M.D.

Davisburg, Mich.

SOUTHERN CALIFORNIA PRACTITIONER.

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ORIGINAL.

A FEW REMARKS ON THE CLINICAL HISTORY AND TREATMENT OF FEVERS (TYPHOID AND MALARIAL) IN LOS ANGELES.

BY GEO. L. COLE, M. D., LOS ANGELES, CAL.

In the winter of '87, when I arrived in Los Angeles, it was my fortune to meet, among the first cases in practice, a subject prostrated by a continued fever. It was not the typical typhoid I had been accustomed to meet; it was not an intermittent, nor yet a remittent, malarial fever. It puzzled me, as I often have been puzzled since. I called in consultation a physician of recognized ability and fame, who had been practicing here many years, and who doubtless had seen many such cases. When pressed for his diagnosis he promptly gave it, namely, "A sort of hybrid-mongrel-bilious-remittent-typho-malarial fever." It seemed a very exhaustive title, somewhat unscientific, but, nevertheless, a diagnosis that I certainly could not dispute. Many a time since I have felt inclined to seek shelter under such a term, feeling that thus I might be safe.

It has been my experience that seldom, indeed, do we find the typical typhoid rise of temperature, one or one-and-a-half degrees daily, with the morning remission slightly lower than that of the preceding evening. The temperature usually rises more rapidly, and we often find the thermometer registering 102, 103 or 104 at the first examination. The prodromal stage is short, and the onset more acute than our authors de-

* Read before the Los Angeles County Medical Association, May 3, 1895.

scribe. Nor do we so frequently find the "pea-soup discharges." A constipation is as often seen as a diarrhea, and possibly more so.

There is also a peculiarity about the *abdominal pain and tenderness.* It is usually found to exist in the epigastrium rather than in the right iliac region. It is also found earlier in the disease, usually at the first examination rather than at the sixth or eighth day, but is rarely severe. (The tenderness over the epigastrium is suggestive of malarial complications.) *Tympanites*, while usually, in fact almost without exception, found to occur, does not assume marked proportions, seldom indeed causing great discomfort. *Intestinal hemorrhage*, while found in some cases, certainly does not bear the proportion of one in twenty, as is usually stated, and when seen is usually of moderate degree. In only one case have I seen it jeopardize life. *Rose spots* usually show plainly—in fact I am very skeptical as to the existence of typhoid here without them; and where they do not appear, am more than usually careful in excluding from the diagnosis acute tuberculosis or continued malarial fever. *Delirium*, which is usually stated as being more frequently present than absent, is really more frequently absent than present, usually mild and not prolonged. On the other hand, *headache* is more severe in proportion to the foregoing symptoms, often excruciating, and unusually prolonged, generally of the frontal type.

I do not forget that these variations are said by all authors to take place. I simply wish to convey the idea that these variations are here the rule rather than the exception as far as my own observation goes. I have seen a few typical cases, showing malaise, ordinary rise of temperature, diarrhea, headache, iliac pain and tenderness, rose spots and intestinal hemorrhage, but such cases have been exceedingly rare.

Another peculiarity is the apparent delay of nervous symptoms, which show markedly, late in convalescence. The ordinarily genial disposition is changed to one of great irritability, which lasts for many months in some cases.

To my mind there is also found here quite a large number of those cases which are termed by Loomis "*Continued malarial fever*," and by Flint "*Typho-malarial fever.*" Loomis states that the combination of a septic poison and a malarial poison is necessary to produce this disease, but without telling us what this "septic" poison is, denies that it is the true typhoid poison. Flint, with others, on the other hand, acknowledges the combination of the true typhoid and malarial poison, and terms it typho-malarial fever. Both authors agree that the malarial element, may largely predominate, while both also state that the other element, namely the *septic* or *typhoid* element, respectively, may predominate, and thus we have the *continued malarial* fever of Loomis and his followers, with either the malarial or septic quality predominant, and we have the *typho-malarial* fever of Flint and his followers with either the typhoid or malarial element predominating. While not fully agreeing as to true typhoid infection in this class of cases, both factions agree that the intestinal changes resemble those of typhoid fever, while the splenic enlargement

and hepatic involvement are more marked. The gastric disturbance is greater, and the temperature during the early portion of the disease is more fluctuating than that of true typhoid. A chill often ushers in the disease, and the first week shows a temperature curve that resembles strongly a typical remittent malarial fever. This condition is accompanied in many instances by acute wandering pains in the head, back and limbs. After the first week or ten days, the temperature runs a more even course and continues two or three weeks. In several instances I have seen the last week marked by a decided chill, and in one case the temperature rose to 107, when large doses of quinine were given and convalescence was speedily established.

I have been much interested of late in the question of aborting typhoid fever. The statement of such men as our late lamented Loomis, of Flint, Osler, Whittaker and others are plain upon this point. Prof. Loomis has stated in a concise manner what all have taught. He says: "After the poison has once gained entrance into the system, no means have yet been discovered by which it can be counteracted or neutralized so as to prevent the development of the disease. The duty of the physician is to guide the disease, so far as he may be able, to a favorable issue, and prevent injury to organs essential to life, keeping in mind that a certain definite period must elapse before the result can be accomplished." "A patient with some of the premonitory symptoms of fever may perspire, be relieved, and at once recover, but such a patient has not received the typhoid poison into the system, and is not, as is sometimes said, threatened with typhoid fever." In considering the treatment of typhoid fever along this line, it is so easy to turn to any good text book and there see such careful portrayal of remedies and methods that to attempt any exhaustive statement here would be an obtrusion upon your time and an insult to your courtesy. If I may refer to a few points which will elicit a discussion, my object will be attained. That the hygienic surroundings of the patient are most important, and that the liquid diet is demanded, will be disputed by none. That many cases will recover with no treatment and poor nursing, will be also conceded. This, however, will not make us unmindful that often, by the exercise of good judgment and careful instructions to attendants combined with proper medication and remedial measures, our highest privilege, that of saving life, will be accorded us.

There can be little doubt that in the treatment of pyrexia in this disease, hydrotherapy has come to stay. Not only is the reduction of temperature accomplished, and thus degeneration of tissues retarded, by the use of cold water, but recent investigations go to show that by the Brand method the elimination of the toxic element is accomplished through the urine to a much greater degree than by other lines of treatment. While by the expectant plan the toxicity of the urine is two-fold that of normal urine, in those cases treated with the coal-tar derivatives, acetanilid, antipyrine and phenacetin, the toxicity is the same or less than that of normal urine. As opposed to this, the Brand method, when properly carried out in detail, shows a six-fold toxicity of urine (Roque and Weil.) This gives

us a hint as to the cause of so small a mortality under the latter treatment. But it is often impracticable, for various reasons, to use the cold bath as we could wish, and some modification of this method is used with less brilliant result.

As to the use of drugs, pages could be written, but I will not burden you. If any are to be used directly to reduce temperature, probably acetanilid in three to five grain doses is as effectual, pleasant and harmless as any. That it is a tax upon the heart should ever be borne in mind, and the condition of the circulation will often prevent us from using it to any considerable degree. In those cases attended with cardiac feebleness and exhaustion of the nervous system, strychnia will be found to be a most valuable remedy. That its use in properly selected cases has saved many lives, I have no doubt. Alcoholics also have prominent place in medication, but, like all other good things, require a certain amount of discrimination as to the period of the disease when they shall be administered, and as to quantity required. Turpentine has its place in certain cases, especially those accompanied with much abdominal distension and bronchial catarrh and with a dry, brown tongue and tendency to sordes. Many place great reliance upon this remedy in such cases, and certainly we occasionally see this unpleasant train of symptoms improve under its use. Many symptoms and complications will demand our attention, but I will not detain you by going through the list. Suffice it to say that codeine will often be found a most useful remedy in delirium and restlessness, as well as in cases accompanied by diarrhea.

But, when we see the enthusiasm manifested by one Dr. Woodbridge of Ohio over the results obtained by the so-called "Abortive treatment," it is certainly not amiss to calmly stop and ask if there can be any truth in it. I am frank to admit that I do not know. His treatment consists in the use of a combination of podophyllum, calomel, guaiacol carbonat, menthol, eucalyptol and thymol in such a manner as to produce ten or a dozen free evacuations during the first two or three days, and then following with smaller doses or the same doses less frequently repeated, the same to be accompanied by large draughts of distilled or sterilized water. There is some evidence to show that he succeeds in aborting a great majority of cases, and it is said, not only by himself but by other physicians in his vicinity, that he has not lost a single case of typhoid since using this treatment. I do not consider the fact that all our authors have failed to find a remedy which will abort the disease as equivalent to the assertion that no such remedy exists. I can not wholly accept the following view of Whittaker. He says: "When it is remembered that typhoid fever is a disease of long incubation, that the poison is received into the body at least two weeks before the manifestation of symptoms, by which time micro-organisms have penetrated into the recesses of tissues out of reach of remedies introduced into the intestinal canal, it may be understood why hopes of parasiticidal agents may not be entertained." If the typhoid bacillus gains entrance to the alimentary tract, then produces a toxin which gives rise to the symptoms of typhoid, I confess I cannot readily

understand why any substance introduced into the alimentary canal which may distroy the bacillus as soon as the disease is fully established, may not cut the disease short at the end of the second week. If the bacilli are allowed to reproduce their kind, in turn to produce toxins, it seems to me perfectly rational that the disease should be continued. The fact of immunity being produced for a certain period by an attack of typhoid would suggest that antitoxins are produced in the system after a time which render void the onslaught of the toxins, and thus the disease is brought to a termination, provided the vital forces do not first succumb. The almost universal teaching having been on the expectant plan, we can readily understand how it might be possible to cut short the disease, and yet for all of us to go on treating upon the old lines. I would like to ask how many of the practitioners in my hearing have ever made the attempt to abort a case of typhoid when it was fully developed? We all, I think, see now and then a case of typhoid showing the rose spots on the eighth to the twelfth day, which will draw to a close soon after. In other words we see the "abortive" cases of authors, but do nothing to produce them. This would seem to me a commendable line of research.

Salol appears to be a remedy useful in this manner. If, as is claimed, the component factors, remain intact until the intestine is reached, when the pancreatic fluid is brought in contact with it to resolve it into carbolic and salicylic acids, it would seem to be one of our best intestinal antiseptics. When large doses are given, the urine shows the same characteristics as when carbolic acid has been absorbed to a great extent. The chemical change wrought by the pancreatic fluid is not produced by the gastric juice. Cases of typhoid in my own practice, treated with salol, have seemed to run a much milder course than would otherwise have been expected.

With regard to simple malarial fever of a remittent or intermittent type, while we must certainly admit that it does exist, we do not see the pernicious type found in other countries of the same latitude. In every case where I have been satisfied a malarial infection was the sole cause, I have taken pains to ascertain if the patient had either contracted the disease in some other locality or if he had previously *ever* had ague in some other part of the United States or Mexico. In all cases except three, such had been the case. Singularly enough, all three of these cases existed in that portion of the city known as Arroyo de Los Reys, between Temple and Sixth streets in the rear of the Normal school building. These also occurred before the water was piped in that locality. One of them was a child two years of age, born in Los Angeles, while the other two were adults who had lived here more than 30 years and had not been sick during this time. These cases were seen in the same season, and at a time when much soil was being overturned by street improvements in that neighborhood. In other portions of the city I do not notice that any particular locality is more prone to malarial fevers than any other sections. A case now and then is seen where the temperature goes to 105, 106 or 107, with a decided intermission or remission, which yields readily to a cholagogue and large

doses of quinine. One case of intermittent type having a temperature of 107 at the first visit, having previously had a distinct rigor, was discharged on the 4th day. She took during the 24 hours following the first chill 40 grains of quinine with one-half grain of morphine; the second day 30 grains quinine, and on the third day 20 grains, with instructions to continue at least 10 grains a day for a week or more. Such cases as this, but with a lower temperature, are not infrequently seen. The class of cases recognized as *chronic malarial infection*, showing periodical neuralgias, and other symptoms, as numbness, etc., distinctly and regularly periodical in character, with or without slight rise of temperature, is occasionally, but not frequently seen.

217 South Broadway.

RHEUMATIC PERITONITIS.

BY F. D. BULLARD, A. M. M. D., LOS ANGELES, CAL.

April 29th, I was called to see Geo. P., aged ten years. Two days previous he had ridden horseback considerably, contrary to his custom, and the day before he complained of pain; on the evening of the 29th, I found him suffering from peritonitis, the abdomen tender, somewhat tympanitic with paroxysms of severe pain; he also was vomiting. His temperature was 104°, pulse 125 but of a good character. He had had no chill. For several years he has suffered at intervals with otitis, and at first I was suspicious of septicemia. So great was his pain that three-fourths of a grain of morphine did not give him a comfortable night. The next morning the left ankle was swollen and tender, and by night the right ankle and knee involved, with excruciating pain along the sciatic nerve. Urine scanty, high colored, and exceedingly acid. At this time the diagnosis of acute rheumatic fever, with special involvement of the peritoneum was made. The pain over the region of the appendix was especially marked. Treatment was now changed, salol and phenacetin capsules five grains every two hours were given for two days, the bowels opened by an enema of epsom salts, and warm applications made to inflamed joints as well as to the abdomen. The successive involvement of various joints and the alleviation of those at first involved confirmed our diagnosis, but as the salol and phenacetin did not seem to stop the progress of the disease, I thought of giving the salicylates; knowing from personal experience how disagreeable this valuable remedy is to the stomach, I looked about for some form in which to give it, which would be alike efficient and palatable. I chose Liquor Tongaline Salicylatis commonly known as Tongaline, and found that when given after eating, a teaspoonful four or five times a day, it brought about a good recovery. The retention of the medicine by the stomach was aided by beginning with small well diluted doses. A recurrence of the attack at the end of the second week was quickly controlled by a resort to the Tongaline. This was the first case of Rheumatic Peritonitis I had ever seen, the symptoms and history were so marked, the response to treatment so quick that I deem a short note of interest.

Apropos of this rather rare condition Dr. Grothan, in the *Omaha Clinic*, gives the following resume of the salient features in the diagnosis of primary rheumatic peritonitis.

First.—Early in the disease the saliva is acid, there is free acid perspiration and hyperacidity of urine.

Second.—There is pain and tenderness on pressure over the abdomen but not the "board like" condition of the abdominal wall due to pyogenic micrococci.

Third.—The tympanites is not so well marked as in peritonitis due to direct infection; nor have we ever seen gaseous distension, so common late in other varieties due to enteric paresis.

Fourth.—It can readily be differentiated from septic peritonitis by history and general condition of the patient.

Fifth.—Tubercular peritonitis is, as a rule, more subacute and accompanied by ascites and other tubercular processes.

Sixth.—Constipation is less marked than in most other acute forms of peritonitis.

Seventh.—Circulation does not show the rapid feeble pulse of septic peritonitis, nor the wiry thread like condition seen in traumatism.

Eighth.—The temperature differs in no way from the acute articular affection

Ninth.—In no case have chills been present.

AN ADDRESS.*

BY G. L. SIMMONS, M. D., PRESIDENT, SACRAMENTO, CAL.

Ladies and Gentlemen, Members of the Medical Society of the State of California: One year ago when I received notice of my election as your President, I was in the midst of preparations for a prolonged vacation from the State. A radical change was deemed necessary for my health, and, had I earlier known of a mention of my name in this connection, I should at once have declined the honor, believing that I would not be able to serve you in an acceptable manner. As the selection was had, however, without this knowledge, I felt it to be my duty to accept the position, to somewhat abridge my vacation and to return home with an earnest desire to do all in my power to maintain this State organization of medical men; now the chief representative body of the two thousand practitioners of California. In acknowledging my indebtedness to you for the great honor you have done me by elevating me to this highest office in the gift of my profession, I ask your kind indulgence for any errors I may unwittingly commit as your presiding officer.

THE SAN FRANCISCO MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

It would seem proper that I should first refer to the important medical event which has taken place in our State since your last meeting, and towards the success of which a liberal sum was voted from your treasury.

*Delivered at the Opening of the Twenty-fifth Annual Meeting of the Medical Society of the State of California, April, 1895.

The gathering of the American Medical Association in San Francisco last June under our auspices, should be a subject for general congratulation. Not only were members present from all over the Union, in excess of the most sanguine anticipations, but the character of the papers received and read gave to the proceedings an unusual interest, and must secure to such a representative national body an enlarged influence. In accordance with the instructions given to your delegates it was voted to make no change in the code, a majority believing that "the Ethics of the Fathers" are clear, concise and applicable to the varying conditions of professional life and knowledge. The magnificent entertainments given to members of the Association in this city and the good fellowships engendered therefrom, are also subjects of pride and universal satisfaction. I feel that we should specially recognize the value of the services of a few of our members in first presenting our claims for this national meeting. and in afterwards carrying out the preliminary work essential for its success. * * * *

Ever since our first annual meeting in San Francisco, just a quarter of a century ago, we have had the presidential services of men whose unselfish lives and devotion to principle have led them to deplore the want of a fully organized profession; but I believe no one has pointed out the fact that it is probable our feeble cohesive elements resulted from exceptional conditions which were not present in any other section of the American Union. Without question, our immigration was originally composed of representatives from the most active and ambitious elements of the present century. For the first time in history, there was offered to men of every nation a free and untrammeled field for the mining of precious metals. The cost of journey by sea or land to this State, then far removed from the center of population, the courage to face the greatest dangers, the health and youth essential to lead exposed pioneer lives, all combined to bring here an independent and self-reliant people, overwhelmed by the desire for the sudden accumulation of wealth. The ambitions and mental peculiarities of such a population formed a most original field for observation, and the leading traits were certainly those of independence, self-reliance, love of excitement, change, speculation and criticism.

Very naturally the same features were also evident in the ranks of the medical profession. Here were representatives from all the leading medical schools in the world, each having the most unbounded faith in his own methods and education, speaking different languages, with habits and prejudices that had not been worn smooth by the rapidity of international travel and without the refined influence of home life, is it strange that they were restless, impatient of restraint and ready to ignore the qualifications of rival practitioners. To the credit of many of these educated men we should place the fact that they were often the best organizers to develop out of chaotic conditions, the institutions of this State, even if their medical work was marred by personalities and their dignity lowered by aggressive disputations. * * * * * * *

From 1850 to 1860, several attempts were made to organize the profession into local and State Societies, but, with few exceptions, efforts in this

direction were not a success. A review of the medical literature of that period, however, shows that even under the most unfavorable conditions for study, and amid all the excitements and changes incident to our pioneer life, a fair proportion of practitioners here applied themselves to original work and investigations. It should also be noted that many of our members were prominently interested in microscopy and botanical work, and that some of the most serious and important operations ever attempted were successfully performed and reported by the earlier surgeons of California. It is also certain they first demonstrated that the serous cavities of the human body and the larger joints could be successfully invaded by the knife when necessary to preserve life or limb. At this period there were laid the foundations for our medical schools and hospitals which now stand among the best of our educational land-marks. The self sacrifice of the founders of these institutions, their discouragements and disappointments, their large donations of money, all show the grandest results of individual devotion to medical science.

Since the first decade, in some sections of the State, the value of an organized profession has been recognized and maintained, but in others many practitioners stand aloof from association, and do not see (as stated by your last President, Kenyon) the power of combined effort to elevate the profession and to maintain its influence. How to reach this class who add so little to the sum of medical knowledge, is an important question. In my judgment, much could be accomplished by this Society lending its influence to the formation of small district societies. This could be attained in the same way as has been done by organizers for fraternal and benefit societies. As a practical method in an endeavor to add to our numbers and increase our associated influence, I respectfully recommend the appointment of an officer whose duty should be to visit certain sections of the State and perform the initial work in this field of pioneer isolation and degrading jealousies. Let us so act that the close of this century, so fraught with the grandest discoveries in medicine and surgery, may see us a united profession and in close fellowship with our fellows throughout the world in the saving of human life and the relief of human suffering.

SERUM-THERAPY.

Since your last meeting, the medical profession every where has been confronted with a question of great importance, involving, as it seems to do, a change in our system of therapeutics more radical than any advocated for many years In the midst of the polypharmacy of the present day, with an accumulation of supposed remedies, even the names of which tax the best of memories, we witness a revival along bacteriological lines, and see that the evil effects of diphtheria are often controlled by the injection into the circulation of a specially prepared serum. The literature upon this subject is so well known to you, as also the observation of certain cases, that it is unnecessary to refer to this branch of the subject. It may be said, however, that at no time in the history of medical science, have societies like this assembled under a greater pressure of public inter-

est in the determination of a question of a scientific nature. On both continents, the public press is constantly publishing successes to such an extent as to interfere with accurate investigation, and governing boards, that have persistently opposed and neglected the investment of funds for healthy water supplies and proper sewage disposal, are urging appropriations for experiments upon pathogenic germs, often generated by their own neglect of the simplest rules of preventive medicine.

Let us trust that here and elsewhere, the pangs of disappointed hopes raised in many a poor sufferer from tuberculosis may not be repeated in the parents of diphtheritic children. Ready as our profession always has been to examine the claims of any new agent in the treatment of disease, adopting from any source all means which may possibly inure to the benefit of the lives of those entrusted to our charge, may we not also in the case of the new theory, with the State aid for the distribution of antitoxine so recently bestowed. "Prove all things and hold fast to that which is good."

PROFESSIONAL REMUNERATION.

Of a few subjects of special interest to California practitioners, one of the most important is that relating to compensation for professional work from those who are able to pay for the same. When it is considered that the length of time and expense attending a good medical education have been nearly doubled during the past twenty years, is it not deplorable that the incomes of a majority of physicians have been reduced to such an extent that many are in an impecunious position and find it difficult under modern demands to balance their receipts and expenditures. While a few practitioners in larger centers have been paid extra fees and have obtained a certain degree of independence, the great mass are held down by poverty. On all sides the services of medical men are underrated, and courts, corporations and beneficiary societies appear to combine to reduce our compensation. The upright judge, who, without a smile, allows probate fees of thousands to young attorneys, haggles over an account of hundreds for medical services which generally involve a night and day attention in the presence of sights and scenes of the saddest and most terrible character. Corporation directors arrange a plan by which thousands of their well paid employees receive in hospitals or private homes the services of the most competent physicians and surgeons at a cost *per capita* so low that its insignificence should never be mentioned as an honest recompense, and a beneficiary society (one of the largest in our State) has recruited its membership upon the representation that doctor's bills will cost the members comparatively nothing.

With facts like these before us, how long will it be before the situation of our practitioners will be analagous to that which now obtains in some European cities, where medical clubs absorb 90 per cent. of the male population, or, as in Birmingham, where it is said competent medical men give their services and medicines at a rate of a penny per head per week. Without any desire to advocate interference with the freedom of individual action in so important a matter, I would respectfully ask, is not this

growing custom a blow to equity and justice? In these days of the general recognition of the principle that "the laborer is worthy of his hire," how comes it that the members of that calling who give more to the poor and to communities than all other professions put together, should have the value of their services cheapened, where present returns offer the smallest hope for independence? My own feelings prompt me to say that if medical organizations do not adopt some means to remedy this evil, the profession as a whole deserves to be kept in poverty and to feel the pangs of leaving unprovided loved ones.

PUBLICITY IN PROFESSIONAL MATTERS.

For many years the unwritten law of our profession has prevented its members from contributing articles upon medical subjects to the public press, even when they were smarting under the greatest misrepresentations. Publicity has been considered as belonging to the irregular and charlatan, and as the life career of the honest physician is one of confidence, it has not been deemed possible to attempt even a mild innovation which might lead to the betrayal of such an important feature. As a result of this close policy we find a general misapprehension existing in the United States in regard to the education and methods of what we call the regular medical profession, and this misapprehension, or want of knowledge of truth, has, in my judgment, had much to do with the spread of quackery and irregular practices throughout the Union. Let any one of you lose your identity as a physician (as I have done during the past year) and mingle in general society and I am sure you will be amazed at the statements you will hear as to the practices of your chosen calling.

In all parts of cultivated Europe, government so controls this subject that the same evils do not exist, and the irregular is relegated to his proper position. But here in free America, our people for years have been led into the most erroneous conceptions, and no attempt has been made to publicly explain the true position occupied by the medical profession. The average citizen divides all practitioners into three "pathies," the oldest fashioned of which is allopathy. In vain we say individually that there is no school of medicine in the world that teaches such a "pathy" and no physicians who practice it or allow such a classification, that the name and definition were an invention of Hahnemann for his own purposes, the use of which conveys to the popular mind the idea of exclusive methods and dogmas or an exactly opposite conception to what is true.

Quite early in the history of the American Medical Association, the eminent Dr. Geo. A. Wood, in an annual address as President, made use of the following language on this subject, which certainly embodies the sentiment of the regular profession: "As intelligent men we were taught and have always practised the cure of disease by any and all methods which can be proven to be for the best interest of our patients, and we are bound by no limits other than those of truth and honor. Let us show when the epithet of 'allopathist' is applied to us by others that it is false, inappropriate and offensive, and that the use of it is contrary to gentlemanly courtesy and the proprieties of cultivated society."

Our own State Society years ago passed resolutions in regard to this subject, which were published in our proceedings. As these books are seldom read by the public, no apparent benefit was ever made manifest, and many editors, lawyers, the clergy and citizens generally, still continue the use of the erroneous appellation. Having the fullest faith in the intelligence and fairness of my countrymen, and believing that when the truth is presented in a proper manner, a majority will accept it, I recommend that effort be made to enlighten the public upon the question of the true position of the medical profession, and the relation it sustains to all 'pathies, healers and faith cures.

THE PUBLIC AND PREVENTIVE MEDICINE.

One of the most difficult questions to present to the governing boards of cities and towns is that concerning the public health, and few outside of the profession understand, as stated by the best authority, "that so common a disease as typhoid increases in proportion to the saturation of soil with decomposing organic matter, and decreases in proportion as a city is well sewered and uses only pure drinking water." My object in referring to this particular subject is to emphasize the effort to discuss questions relating to preventive medicines before the public by means of free popular lectures. I believe it to be the duty of each one of us to aid college extension in this direction, and to give to every town the knowledge so necessary to maintain the public health.

Another direction in which our efforts would result in benefit to sufferers from disease, and to our State at large, is in keeping before the people of the whole country the superiority of our climate in many of the gravest affections. While it might appear that this subject has already been presented to the fullest extent by our members and Boards of Health, my opinion is that thousands of eastern invalids are not aware that we have in many portions of our State peculiarly favorable conditions for the open air treatment of consumptives, which do not obtain in other sections. It should be remembered that one of the first causes for the rise and importance of the southern sections of California resulted from the reports on the climate of the coast section made by our first President. During the past winter I have made some personal and comparative observations of the climate of the "Riviera," and it can easily be shown by the meteorological tables of Nice, Mentone or Cannes, that we have a greatly superior climate in winter, while the number of our sunny days are beyond their utmost claims. For climatic reasons alone thousands of Americans still seek this section of the old world, ignorant of the fact that in their own country, hardly five days journey from the Atlantic seaboard, without the risks and annoyances of a longer trip by water, there exists a land of winter flowers, more beautiful and healthy than any in Southern Europe.

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OLIVER WENDELL HOLMES.

In closing this address, I need not apologize for a brief reference to the loss our profession has recently sustained by the death of Dr. Oliver Wendell Holmes. Although to the public he was known, loved and

honored for his literary work, among medical men, his real labor was recognized as belonging to medical science. For thirty-five years he acted as full Professor in the Medical Department of Harvard, and in his earlier career, gave to the world a series of prize medical dissertations full of original thought and investigation. If he had done nothing else for medical science than to bring the weight of his mind to the discussion in 1843 of the question of the communicability of puerperal fever from one patient to another by the "accoucheur," that one effort to establish a theory, now everywhere acknowledged to be correct, and which has saved the lives of many mothers, entitles him to the gratitude of the entire profession.

As a professor of anatomy, he was recognized as prominent long before his abilities in general literature had shone upon the world. In the earlier efforts to develop the study of microscopy, Holmes was most active and original. Although at that time exercises in this department were not required by the faculty, his interest was so great that he formed classes for private instruction at his home on Montgomery Place, and I well remember the enthusiasm with which he related the fact that his object-glass was of American manufacture and had been taken to Europe by Dr. Burnett who, after challenging comparisons had found it to be superior to any then known in the world. In connection with his earlier work in microscopy, attention has been called in the *American Microscopical Journal*, by Dr. Ephraim Cutter, now of New York, to the fact that Holmes then taught the use of the instrument with direct illumination, the professor having an arrangement of his own—a six inch black disk fastened to the tube and graduated so that turning the disk would act as a fine adjustment.

With such a professional record, and while his name is being honored by laymen in Europe as well as in America, is it not most fitting that medical organizations, even on the shores of the Pacific, should not allow the brightness of his fame as poet and novelist to obscure the labors of years for medical science of a man, spoken of in a late number of the *British Medical Journal* as "one of the most lovable and notable figures of modern medicine."

Apart, however, from his position of medical author and professor, we owe to Holmes a debt of graditude for his constant desire, evident in his general literary work, to place the profession of medicine in its true position before the public. His keenest satires and vigorous treatment against charlatanism and irregular medicine may be found in connection with his highly prized papers in literary magazines of the day. In him the good doctor always spoke, although often under the name of "Autocrat" or "Professor." Without exception, the medical students who listened to his teachings carried through their lives a continual interest in what has been called a delightful personality, and his genial medical wisdom, interspersed thoughout his writings, has done much to enliven the paths of these "toilers who have no rest"—the overworked practitioners.

In 1860 Dr. Holmes delivered an address before the Massachusetts Med-

ical Society, entitled "Currents and Counter Currents in Medical Science," afterwards published with an essay upon "Homeopathy and kindred Delusions, and the Four Topics of "The Weapon Ointment," the "Tar Water Mania of Bishop Berkeley," the "Royal Cure of the Scrofula," and the "History of Perkins' Metallic Tractors." All, as the author says, 'published to illustrate the ease with which numerous facts are accumulated to prove the most fanciful and senseless extravagances." If this work could be placed in the hands of the people to-day there would be less quackery and fewer delusions. On the tenth of last October, it was my privilege to stand by his open grave, in the beautiful cemetery of Mount Auburn, and to pay silent worship to all that remained of the great man always in fellowship with youth, who, forty years before, had received me as a struggling medical student from the Pacific coast. In common with others, I am sure that his kindly encouragement made easy a most difficult path. Truly he deserved a cheerful and serene old age, and a place among "modern immortals."

"In love he practiced, and in patience taught,
The sacred art that battles with disease;
Nor stained by one disloyal act or thought,
The holy symbol of Hippocrates."

ABSTRACT OF THE REPORT OF THE COMMITTEE ON CLINICAL MEDICINE.

Of the Medical Society of the State of California, April, 1895.

BY DAVID POWELL, M. D., CHAIRMAN, MARYSVILLE, CAL.

MALARIA: ITS CAUSE AND ITS EFFECTS.

The speaker said: The title of this committee, "Clinical Medicine," clearly indicated that the Society desired a practical consideration of the phenomena of diseases based on useful lines, rather than an elaborate treatise founded on experimental or theoretical conclusions. He therefore desired to present the subject of "Malaria: Its Cause and its Effects," with special reference to the forms most frequently encountered in this State.

Two of the most important achievements in pathology of modern times were the almost simultaneous discoveries of the bacillus tuberculosis by Koch, and of the plasmodium malariæ by Laveran. The former was received with the greatest enthusiasm and *eclat* by the profession in every part of the world; the latter created scarcely a ripple of excitement, and, until very recently, attracted but little attention, either in this country or in Europe. Yet, viewed from a practical standpoint, the discovery of Laveran is infinitely the greater. The bacillus tuberculosis is said to cause one-seventh of the total mortality of mankind—the malarial microorganisms, directly and indirectly, not less than one-half.

The study of malaria is therefore interesting upon theoretical grounds alone, while, from a clinical point of view, there is scarcely a disease that assumes a greater practical importance; for, notwithstanding the assertion

of Osler, that malarial fever is rare on the Pacific coast, we are forced to admit that it prevails, especially throughout the great interior valleys of the State, to an extent and with a persistency true of no other disease. Among the prevailing diseases reported to the Secretary of the State Board of Health during the past year from different localities in the State, representing only a small percentage of the total population, the number of cases of malarial fevers outnumber those of pneumonia and typhoid fever more than twofold While these reports do not furnish sufficient data upon which to base even an approximate estimate of the actual number of cases treated, they indicate the wide-spread existence of paludal fevers in this State; and the possibility is suggested, in the light of recent etiological investigations, of their diminishing prevalence in the future by the employment of proper prophylactic measures.

Laveran, in his classical work on Paludism, says: "Numerous facts tend to prove that the infection may take place through drinking water, and that persons who have contracted paludism (malarial fever) have almost always made use of water of palustral (with humid or marshy soil) localities." And in support of this statement he says further: "It has been found repeatedly that in the same localities, among persons living under the same conditions, but drinking water from different sources, some were attacked by palustral fever while others escaped. In certain localities, which were formerly insalubrious, it has been sufficient to place pure water at the disposal of the inhabitants, instead of the stagnant water which was formerly used, for palustral fever to disappear; and in localities otherwise healthy, people may contract fever whose drinking-water comes from unhealthy localities, and the persons most exposed to infection in these conditions are those who consume the most water." Again: "Travelers passing through unhealthy countries often succeed in escaping fevers by only drinking water that has been boiled, while people who do not take that precaution suffer severely."

From the wide-spread prevalence of malaria in this State, it is evident that little has been attempted so far in the way of adopting means for its elimination; yet intelligent and persevering efforts in this direction would unquestionably lead to very great improvement, if not the extermination from many a fertile plain and valley of a serious and preventable disease. As some one has aptly said, "Science has enabled us literally to place our finger upon this enemy of our race, and why should we hesitate to crush it?" It is true that we do not here often encounter the grave types of paludal fevers that are endemic in the southern and southwestern States. In my experience cases of pernicious malaria in California are rare; and the more severe forms of malarial diseases are not so common as they were in the early settlement of the State. Since that time many changes in our environments—including cultivation of the soil, improved sources of water supply, the rapid growth of cities and towns, etc. have modified, to a great extent, the intensity of the malarial poison; and yet, in many communities, it still finds numerous victims.

Malarial Intermittent Fever: In this State the forms most commonly encountered are the quotidian and tertian types of intermittent. After a period of incubation, varying from 4 to 15 days, during which there is experienced more or less severe prodromal symptoms relating mainly to the nervous and digestive systems, a paroxysm occurs, the three stages of which following each other in orderly sequence and succeeded by complete apyrexia are pathognostic of its malarial origin. If we add the therapeutic test of the cinchona alkaloids, every doubt in diagnosis is usually removed; for, as Osler says, "If the practitioner will take to heart the lesson that an intermittent fever which resists quinine is not malarial, he will avoid many errors in diagnosis."

Malarial Remittent: Next in order of frequency on this coast, are the remittent and continued fevers. It is not improbable, that the continued character of the fever may be attributed to the constant presence in the blood of the malarial microorganisms in various stages of development. The discovery of Laveran has made clear many obscure points regarding malarial-continued fevers, particularly with reference to diagnosis. Their early discrimination from other forms of continued fevers, including typhoid, "is one of the most valuable results of modern clinical investigations." In every case, an accurate and definite diagnosis can be made through the examination of the blood.

Typho-malarial Fever: Under this title is incorrectly classed a form of remittent fever—not infrequently observed in this State—which does not yield readily to treatment, and in the course of which certain adynamic symptoms are developed.

Malarial Cachexia: The effects of chronic malarial poisoning are familiar to physicians residing in malarious districts. The striking features of this condition—the saffron-yellow skin, edema of the extremities, shortness of breath and palpitation upon slight exertion; the excessively enlarged spleen, and the frequent hemorrhages—are indicative of grave constitutional disturbances, and symptoms threatening life are often present.

(The treatment recommended comprises the "orthodox" remedies usually administered.)

ABSTRACT OF THE REPORT OF THE COMMITTTE ON SURGERY.

Of the Medical Society of the State of California, April, 1895.

By R. A. McLean, M.D., Chairman, San Francisco, Cal.

THE SUPERIORITY OF AMPUTATION OVER THE SO-CALLED CONSERVATIVE METHODS OF TREATMENT OF TUBERCULAR DISEASE.

The speaker said his remarks were intended to apply only to cases of unusual severity. It was not contended that amputation should be done except in such aggravated examples as offer no prospect of gaining a comfortable degree of activity after iodoform injection, resection, excision, partial amputation, and the use of orthopedic apparatus. In selecting a method

of treatment the surgeon should be governed by the desire to secure to his patient the greatest degree of activity, and not by the desire to sacrifice only the smallest possible part of the extremity.

The modern artificial leg supplies to a wonderful degree the place of the natural extremity, and affords greater activity and comfort than can be obtained by more conservative methods in these cases. Owing to the mechanical perfection of this device, as well as to its unobjectionable appearance, the surgeon is now justified in advising amputation rather than the procedures before referred to. Amputation through the foot should be restricted to the operations of Lisfranc and Hey. Chopart's amputation should be discarded, owing to the tendency of the anterior surface of the stump to be depressed by the unopposed action of the tendo-achillis in drawing the heel upward. The effect of this displacement is such as to render the adjustment of an artificial foot difficult and unsatisfactory. The subastragaloid amputation and the operation of Pirogoff possess no advantage over that of Syme, and give less space for mechanism of the joint forming the ankle of the artificial foot. The difficulty of securing motion at the situation of the ankle would also exclude the various modifications of these amputations, as well as the operation known as the osteoplastic resection for disease of the posterior tarsal bones.

For the correction of severe forms of talipes varus, the operation of tarsectomy has recently been extensively practised. In many cases the immediate result appears to be satisfactory, but after a few months there is a great tendency to relapse. The shortening of the foot and stiffening of the ankle and the medio-tarsal joints render this operation a doubtful substitute for amputation. In the treatment of extensive tubercular disease of the ankle, amputation offers a speedier cure than resection, and the activity of the patient will certainly be greater than would follow the retention of an anchylosed or insecure joint. In neglected cases of tubercular disease of the knee-joint, with subluxation backward of the tibia, it is possible to place the leg in extension only after removing a considerable portion of the lower extremity of the femur and head of the tibia. The resulting shortening and anchylosis greatly hampers the activity of the patient. Resection of the knee-joint should be preferred to amputation only in cases confined to the synovial membrane and cartilage, and not complicated by extensive disease of the bone or subluxation of the tibia. In tubercular disease of the hip-joint, excision of the head of the femur, incision and curetting of the synovial sac and cartilage, or tunnelling of the trochanter and neck, will, in cases not far advanced, often effect a cure without resulting in serious impairment of function. Such operations, however do not meet the requirements in the more severe cases.

The usual incision is sufficient to give access to all of the suppurating tissues, and its position is not favorable for drainage. The extent of the caries of the shaft of the femur necessitates a section usually some distance below the trochanters. It is difficult to deal thoroughly with intrapelvic

abcesses and caries of the ilium through the usual incision for exsection. Convalescence is tedious, and suppurating sinuses are almost certain to remain. The remnant of the extremity is unserviceable by reason of the flail-like attachment to the pelvis; or, if bony anchylosis occurs between the femur and pelvis, the excessive shortening necessitates a high patten under the foot. Finally, the prolonged confinement and the difficulty in maintaining asepsis frequently produce complications which prove fatal. It is in such cases that amputation at the hip is especially indicated. It is generally conceded by surgeons that patients suffering from chronic joint disease bear amputation well, if but little blood be lost. Until recently hip-joint amputation was a bloody operation; but, owing to the labors of Wyeth, Senn and others, we now have the means of avoiding hemorrhage almost entirely. In order to get better access to the ilium I have used the elastic tube in the form of a figure-of-8 bandage around the thigh and pelvis, crossing the turns of the tube on the crest of the ilium. In thin patients this arrangement of the tube when drawn tight will compress all of the vessels passing from the pelvis to the flaps.

The speaker said: During the past year the clinic at the City and County Hospitals had furnished seven cases of amputation at the hip. The histories of these were then detailed, several having been preceded by other operations of a conservative character. Some of the cases were exhibited to the Society. A case of paraplegia, following a depressed fracture of the laminæ of the three lower dorsal vertebræ, was also shown. This patient would not at first submit to operation, and it was several months before the posterior arches of the two upper lumbar vertebræ which were pressing on the cord were removed. In spite of every means the case had only been slightly benefited. The speaker ventured to suggest that in this case a double amputation through both thighs would greatly increase the patient's range of activity.

ABSTRACT OF THE REPORT OF THE COMMITTEE ON OBSTETRICS.

Of the Medical Society of the State of California, April 1895.

BY W. F. CHENEY, M. D., CHAIRMAN, SAN FRANCISCO, CAL.

LACERATION OF THE PERINEUM AND ITS IMMEDIATE REPAIR.

The speaker said: It is a fortunate thing for women that sentiment in the lying-in chamber is giving way to sense. Every woman, after labor, should have her vulva submitted to visual inspection by the medical attendant before he leaves the house. It is also essential that the floor of the vagina be examined. Often the exterior of the perineum shows no tear whatever, when within the posterior commissure the mucous membrane, connective tissue and muscles have been deeply lacerated. To bring this injury into view, the best way is to insert a finger in the rectum and push forward the vaginal floor. Unfortunately, there exists a popular impression, shared in by some of the medical profession, that a perineal

tear in labor without forceps, should never occur. So it happens that the man who examines for injuries after labor, and who honestly attempts to repair them at once, if found, has discredit cast upon his work; while another man, less conscientious, is held up as a model obstetrician by the very woman whom he leaves in a condition for the gynecologist to take care of later on. It is a fact, that no infallible method has yet been found to prevent perineal tears, especially in the management of primaparæ.

The speaker said it had seemed to him, from trying both ways, that labor, with the woman in Sims' position, gives better results as regards the perineum than with the woman on the back. Sims' position takes the weight of the presenting part of the child off the soft tissues posteriorly, and places it against the bony symphysis, where little harm can be done. There is not the same tendency on the part of the uterine contractions to crowd the head directly through the pelvic floor, for the force is directed forward of the perineum, against the symphysis and the vulvar orifice. This position, too, gives better opportunity to prevent laceration by the posterior shoulder of the child. The weight of the body of the child is taken off the soft parts; and by manipulation the posterior shoulder can be guided over the posterior commissure with the hand, and so delivered, while the opposite shoulder is, for the moment, crowded behind the symphysis. This manipulation is possible also with the woman on her back, but must be made then in opposition to gravity and with less chance of success.

There are but few conditions, such as eclampsia or extreme exhaustion following hemorrhage rendering the operation for immediate repair of the perineum impracticable. All that is required is a surgeon's needle and silk, plenty of hot water and a moderate amount of common sense. Several hours may be allowed to elapse after labor is completed and still the tissue will unite by first intention.

The speaker had several times repaired a perineum as late as nine hours after it was torn, and once as late as twelve hours, each time with success.

For the ordinary operation, an anesthetic is not required, because sensation in the parts has been blunted by the previous stretching and pressure. The patient should be placed across the bed with her hips down to the edge The vulva and perineum are then washed thoroughly to remove all blood clots and loose shreds of tissue. This may be done as well with plain boiled water as with a solution of bichloride or carbolic acid, unless in exceptional cases, where the woman has previously had a suspicious vaginal discharge. The needle used for suturing should be large enough to take in plenty of tissue, and preferably, should have a half curve. A needle holder is an assistance, but not a necessity. For suture material, plain black or white silk answers every purpose; black having the advantage of being easily seen when the time comes for removal. Silkworm gut is very satisfactory, except that the ends are sharp and stick the patient after the sutures are tied. It is possible to prevent this by clamping a perforated shot on the ends and then cutting the latter off close, but this

complicates the operation and introduces details that are not absolutely necessary. If there is an internal tear extending up the floor of the vagina, either with or without external laceration through the skin, the easiest way to get at it is by placing a finger in the rectum and pushing the tissues forward, while the other hand passes the needle and brings the rent together. This part of the work naturally should be done before the outside is sewed up, and if it is not done, simply making the vulva its former size by external stitches accomplishes nothing for the woman subsequently, and she suffers as much as if there had been no effort at repair. For this internal tear catgut is the preferable materal, so that the stitches will not have to be removed. The sutures should be passed deeply on each side to bring together the retracted edges of the several muscles and restore the proper thickness of the recto-vaginal septum. After this the external laceration should be repaired with silk, from the anus up to the posterior commissure.

The after-treatment of a perineum that has been repaired is comprehended in the word cleanliness. Vaginal douches are unnecessary, in fact are better omitted; but too much water can hardly be used on the vulva and perineum. The water should be quite hot; and should be poured over the vulva, from a pitcher or a fountain syringe, into a bed pan placed beneath the hips. Particularly should this douche be given after every discharge of urine. With regard to the dressing of the sutured perineum, the ideal materials are a pad of iodoform or bichloride gauze placed next the sutures, covered by a thicker pad of absorbent cotton; the whole held in place by a napkin of linen or cheese-cloth, pinned to the binder in front or behind. If the gauze and cotton are not available, clean linen or cotton or cheese-cloth napkins may be placed immediately next the perineum. The household rag-bag, to which recourse is so often had by the ignorant for perineal napkins is one of the abominations of obstetric practice, and should be utterly rejected as a source of supply.

The more extensive lacerations involving the sphincter ani, and perhaps extending an inch or more up the bowel, are not so easily repaired, and fortunately they are not so common. For these more time is required, more extensive preparations and greater skill on the part of the operator.

SELECTED.

DEPARTMENT OF SURGERY.

UNDER THE CHARGE OF JOS. KURTZ, M.D., PROFESSOR OF CLINICAL SURGERY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA, AND CARL KURTZ, M.D.

NEURECTOMY FOR TIC-DOULOUREUX—RESULT, RECOVERY—(Surgical Clinic)—The patient, æt. 50, white, female. Family history: Has one sister who suffers from emotional insanity; otherwise the

family history is good. Previous health excellent. The present trouble began in March, 1892, with severe neuralgic toothache, localized in the right lower molars. Paroxysms were of daily occurrence, and most severe in the mornings about breakfast time. The pain subsided temporarily whenever the teeth were pressed firmly together or upon any substance held between them, but only to return when the pressure was withdrawn. The presence of anything cold in the mouth immediately produced the most exquisite pain; moderate heat produced a soothing effect. After two months the pain became continuous, and four molars were extracted without in any way relieving it. On the contrary, the pain increased in severity until October, when it ceased entirely for a period of two weeks, and then returned as severely as before. Another tooth was sacrificed, but without relief; the pain became continuous until last June, when it again subsided for a period of six weeks. A recurrence then took place, together with an involvement of the parts supplied by the second branch of the fifth nerve. Pain has been constant until the operation. She has strenuously avoided the use of narcotics, but during the more active periods of pain antikamnia in ten-grain doses was found to be an efficacious obtunder.

Present Condition.—Patient is inclined to be plethoric. Internal viscera and functional activities normal.

Operation.—Being prepared and chloroformed, a longitudinal incision, three centimenters in length, was made a little to the right of the infra-orbital foramen, the soft parts held back by retractors, exposing the nerve as it emerged from its foramen. A puncture was next made close to the outer canthus, and a fine tenotome pressed inwards, its point being held close to the floor of the orbit. As soon as the point of the knife was arrested by the edge of the great wing of the sphenoid bone the blade was turned about twenty degrees upon its own axis and drawn slightly forward. By this motion of the blade the second branch of the fifth nerve was divided near its origin from Meckel's ganglion and near its first exit from the cranium through to the foramen rotundum. Hemorrhage from the accompanying artery was insignificant. The nerve was then drawn out at the infra-orbital foramen until it was completely extracted from its canal. The branches supplying the skin of the cheek, upper lip and nose were followed a short distance toward the periphery and then cut off.

For resection of the third branch an incision was made down to the bone, beginning at the angle of the jaw and extending to within two centimeters of the symphysis. At a point five centimeters to the right of the symphysis two holes were drilled through the bone side by side and fifteen centimeters apart. The jaw-bone was sawed through between the holes, and the proximal end dislocated outwards. The lingual nerve was thus exposed and isolated. The periosteum and soft parts were freed from the bone, exposing the third branch of the fifth nerve as it entered the internal maxillary foramen. The nerve was followed up to its escape through the foramen ovale, and then cut off with scissors and drawn out. The soft parts being adjusted, the ends of the jaw-bone were brought in apposition

by a silver wire. The outer wounds were closed by silk sutures, except the one at the outer canthus, which were too small to require such attention. Convalescence has been uninterrupted, primary union resulting in all the wounds. The silver wire was removed about the fifth week, good union having taken place. Eight weeks have now elapsed since the operation, and no recurrence of the trouble has taken place. As is usual in such cases, the patient is elated over the relief from suffering, and her expressions of gratitude are almost ecstatic.

DEPARTMENT OF MEDICINE.

UNDER THE CHARGE OF DRS. F. D. AND ROSE T. BULLARD.

CYCLING AS A CAUSE OF HEART DISEASE—(N. Y. Medical Journal.) A paper on this subject was read by Dr. George Herschell at the Eigth International Congress of Hygiene and Demography in Budapest. The chief danger is the fact that a cyclist takes more excercise than he is aware of and frequently overtaxes his powers; the commonest way is in climbing hills. When he is nearing the top, the heart is dilated with the strain put upon it by the increased arterial tension. If he stopped here to recover himself, no harm would be done; but too often, as there are only a few more revolutions needed, he redoubles his exertions, and puts further strain upon a heart already taxed to its utmost limit, and in those few moments damage has been done to the heart from which it may never recover.

The effects of strain may be divided into four groups: 1. Simple hypertrophy. 2. Acute dilatation, ending either in recovery if cause is removed, or in death if it persists. 3. Chronic valvular disease. 4. Functional derangement. *Simple hypertrophy* is apt to occur in well trained riders who do a great deal of cycling. As a rule the athlete enjoys vigorous health for the few years during which he is actively working, and his heart is enlarged enough only to meet the constant demands upon it; but when the cyclist, no longer in his first youth, relaxes his efforts, his heart is too large for its work, and symptoms of hypertrophy are felt. It may disappear under proper treatment if taken early and cause is removed, but if it has persisted a number of years this is rarely, if ever, possible, and ulterior changes are apt to ensue. *Acute Dilatation* follows over-exertion. Until the individual shows signs of being "out of breath," both ventricles are sending equal amounts of blood into the pulmonic and aortic systems in equal periods of time. Respiration and the heart's action, although hurried by the exercise, are carried on normally and without unpleasant sensations. If exercise is continued, the heart contracts at such a rate that the respiratory muscles cannot keep pace with it. "Shortness of breath" is thus produced. There will be an obstruction to the circulation through the lungs and a small amount will remain in the right ventricle. With extreme muscular efforts, this excess will increase with every beat and the right heart will rapidly dilate. If the exertion is kept up, death by asy-

stole is the result. *Chronic valvular disease* occurs as a sequel to acute dilatation or as a result of hypertrophy. *Functional derangement*, he believes, is a result of a temporary dilatation, the heart remaining irritable from the stretching its fibers have undergone. The inhibitory function of the pneumogastric seems to be suspended, and any slight exertion will bring on palpitation. The symptoms observed are the following: 1. Palpitation. 2. Shortness of breath. 3. Sensation of sinking at epigastrium. 4. Subjective sensations in region of heart. 5. Intermittency. 6. Anginoid symptoms.

These are the possible evils of excessive cycling. On the other hand, he says, there is the undoubted fact that in moderation and under proper conditions it is one of the most health-giving forms of exercise. In established heart disease, strange as it may seem, it is one of the most potent remedial measures. Beginning with the lowest gearing for the shortest periods, and on level roads, carefully graduated cycling is able to establish that compensatory hypertrophy which alone can enable the victims of valvular disease to live in comfort, and for this reason he recommends it. With regard to preventive measures and precautions against the dangers of this fascinating sport, he lays stress on the following points. 1. The use of a low gear. 2. The upright posture. 3. Proper food when riding, and the avoidance of muscle poisons, such as beef tea. 4. The cyclist must avoid preparations of kola and coca, which by numbing the sense of weariness, allow excessive work. 5. On no account should one continue riding after he has begun to feel short of breath. This precaution cannot be too earnestly recommended.

THE PRE-TUBERCULAR AND PRE-BACILLARY STAGES OF CONSUMPTION.—(Atlantic Med. Weekly.) Chas. Manly, A.M., M.D., Denver, Colo. The early pathological changes are not recognizable and the diagnosis should be made objectively. An eminent authority has said, "I esteem rational symptoms as of greater weight than those signs eliminated by auscultation." Associated with progressive loss of weight, nutrition suffers from a loss of appetite and the well-known languor which precedes typhoid fever. Patients have often said, "I feel exhausted when I awake. A few hours in the early morning I feel stronger; at 11 o'clock exhausted again, and the same at 4 in the afternoon." One cannot claim that such a statement of symptoms is pathognomonic of any particular disease, but I do say it *especially true of phthisis.*

He concludes: That there is a pre-tubercular stage; that it is something more than mere predisposition or susceptibility; that it is a mitigated form of consumption; that, other things being equal, continued loss of weight is suspicious of oncoming tuberculosis; that the keynote of this condition is impaired nutrition.

He deprecates the preponderating importance given to the bacillus, this condition of health occupying the position of a primary etiological factor to which the bacillus is secondary.

VASELIN IN ERYSIPELAS,—(Universal Medical Journal) H. Koester, of the Sahlgren Hospital, has made a study of the relative value of the various common methods of treatment of erysipelas. The duration of the fever appeared to be the same when vaselin was used as when Goulard's water, iodine applications, ichthyol and vaselin and sublimated lanolin were employed. None of these remedies were capable of checking the process with certainty, and in exceptional cases this spread over almost the whole surface of the body. The complications, especially the phlegmonous process, did not appear to be greater after the use of vaselin than when other measures were used. Consequently the author regards vaselin as quite as efficacious as the other well known topical remedies, and preferable because inoffensive, cheap, without disagreeable odor, and producing no irritation.

HICCOUGH AND ITS TREATMENT—(Atlantic Medical Weekly.) Dr. Chas. O'Leary. For persistent idiopathic hiccough he applied ice to the cervical and dorsal spine, and has had remarkable and instant relief in four obstinate and severe cases.

OBSTETRICS AND GYNECOLOGY.

UNDER THE CHARGE OF WALTER LINDLEY, M.D., ASSOCIATE PROFESSOR OF GYNECOLOGY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA.

THE ECONOMICS OF PROSTITUTION—(The Medical News)—At the recent meeting of the American Academy of Medicine in Baltimore. Dr. Woods Hutchinson of Des Moines, Iowa, said that reproduction is heaven's first law. "Be fruitful and multiply" is the first commandment in Genesis, and yet every religious or moral code has inveighed against the sexual instinct. It is hard to control; but, instead of being degrading it is of the highest rank and holiest nature. Upon this foundation are built the whole of morality and the social instincts; the family is the nucleus of civilization.

And yet everything connected with the sexual instinct is tabooed in polite society. Modesty affects to ignore its existence. Boys and girls are kept in disgraceful ignorance of one of their most important functions. From this arise many forms of vice. The second evil influence of this denunciation and taboo is to destroy the feeling of obligation to bear children. Married men and women are either refusing or limiting their output to two or three. This is the fruitful source of prostitution, abortionism, onanism, and mental and moral degeneracy. Parents need training as well as children, and no man's or woman's education is more than half completed without such education.

What, then, is the excuse for this ban which has been laid on the sexual instinct? Its excesses solely. To hear most sermons one would think that adultery, fornication and prostitution were its principal results. Its beneficial results overbalance these a hundred to one.

Even its excesses have their uses: they are a means of sterilizing or exterminating the unfit. This is especially true of prostitution. It has the earmark of a process of nature having existed from the earliest ages in every clime, under every religion (a part of the cult of many, in fact.) It has been attacked with merciless severity, absolutely forbidden, crushed out, "regulated" and with only one effect to cause it to flourish with great vigor and wider effect. "Regulation" simply does not "regulate," but increases clandestine intercourse, lessens marriage-rates, lessens fear of arrest and of infection, and increases illegitimacy.

Prostitution is a huge garbage dump, a sewer, a crematory. It draws into it women mainly of the lower class or most degenerate impulses. It cuts short their life expectation. It practically sterilizes them. Very few of them marry, and these are mostly infertile. Only a very small per cent. reform. The chief motives leading to this trade are idleness and love of dress and bad family surroundings. This class of women we can best spare. As to the men, if they get gonorrhea, they sterilize their wives by salpingitis; if syphilis, they either refrain from intercourse, or abortions result until the virus has run its course.—*The Medical News.*

DANGERS OF THE UTERINE TAMPON—Dr. Willis E. Ford in the course of an article in the *Buffalo Medical and Surgical Journal* says: The original idea that gauze was necessary to keep the neck of the uterus open after thorough dilatation, as well as to drain the uterus, was manifestly based upon two errors. First, the uterine canal does not close down and prevent drainage after such operation; and secondly, iodoform gauze is not a drainage tube and does not remove the pus that may ooze into it.

CONTRA-INDICATED DURING PREGNANCY—(Journal American Medical Association)—Huguenin mentions as chief of the remedies which are dangerous to the pregnant woman, salicylate of soda and ergot. Purgatives—castor oil, mineral salts and especially aloes—should be avoided. Oxalic acid and its salts—oxalate of potash, etc.—may prove dangerous. Antipyrin frequently taken inhabits the lacteal secretion; cocain locally applied for fissured nipples has the same effect, and should be proscribed for nursing women. As to operative measures, they are not absolutely contra indicated; we may, for example, extirpate a peri-uterine tumor, the development of which hinders pregnancy, provided the operation is speedy and little blood lost. It is better to wait until the fourth or fifth month before operating. Operations in the vagina or uterus, no matter how minor, should be avoided in order to avoid suspicions of abortion in the patient's mind.

THE RUSH MONUMENT. At the general business meeting of the Amer. Med. Asso. encouraging support was given the Rush monument committee who are endeavoring to secure funds for a monument in Washington to the only physician who signed the Declaration of Independence.

EYE, EAR, NOSE AND THROAT.

UNDER THE DIRECTION OF W. D. BABCOCK, A.M., M.D., PROFESSOR OF DISEASES OF THE NOSE AND THROAT, COLLEGE OF MEDICINE OF THE UNIVERSITY OF SOUTHERN CALIFORNIA.

GLAUCOMA—(Medical Society, Plymouth, England)—Dr. Elliott Square finds eserine with or without cocaine, all that is necessary to relieve the first symptoms of glaucoma and keep the case along until iridectomy shall be performed.

GLAUCOMA, IS IT CURABLE WITHOUT OPERATION?—Annals Oph. and Otol., May, 1895.—Pilgrim reports three cases of unmistakable glaucoma that were relieved and so far as he is able to state cured, the cure being of over a year's standing, by the application of galvanism. A mild current, amount not stated, is applied, the anode to the nape of the neck, the cathode covered with moist sponge to the eyelids of the affected eye, for fifteen minutes. Pilocarpine two grains to the ounce was instilled in the eye. The pain was relieved on the second application. The application was made for about two weeks daily, then three times a week for two weeks, the cathode must be applied to the eye, otherwise the pain is increased.

EXOPHTHALMIC GOITRE—(Arch. d'Elec. Medicale, October 1894.) —Bordier contributes a paper on the treatment of exophthalmic goitre by the induction coil. He reports two cases much benefited, Vigouroux's method was used. 1. To the facial nerve, upper branch, and to the orbicularis palpebarum for half a minute. 2. To the neck between the hyoid bone and anterior border of the sterno-mastoid, the electrode pressed deeply over the carotid artery for one and a half minutes on each side. 3. Over the thyroid swelling by an electrode of larger surface for five minutes. 4. Over the pericardium for three minutes. The thyroid muscles were also made to contract a few times. Treatment three times a week. Indifferent electrode applied to nape of neck. Result favorable.

EXOPHTHALMIC GOITRE.—(British Medical Journal, Feb., 16, '95.) —Owen reports a case of twenty years' standing cured by t hymus feeding. One lobe of thymus gland three or four times a week. For last two months he has taken one lobe a week.

OCULAR TUBERCULOSIS—(Medical Society of Berlin.)—Dr. Silex reports a case of a child, six years old, with a typical case of tuberculosis of the iris. Experimental inoculation in rabbits was conclusive. Child recovered with no treatment It is then well to know that ocular tuberculosis may recover spontaneously.

ELECTRICITY IN INFLAMMATORY CONDITIONS OF THE EYE—Dr. Von Russ (Vienna.) In all irritating affections of the cornea and sclera, he recommends applying a small platinum electrode, sclera button, to the diseased portion, the other electrode being placed on the cheek, to pass for a minute a current of one to one and a half milliamperes. Treatment not painful and no irritative reaction.

MASSAGE OF THE CORNEA—(Medical News)—Dr. Marten recommends direct massage to opacities of the cornea. A ten per cent solution of cocaine is first used, and a massage spoon applied directly to the opacity and used with a circular, gentle motion from one to three minutes. He then kneads the globe of the eye with the thumbs resting on the eyelids.

NERVOUS AND MENTAL DISEASES.

UNDER THE CHARGE OF H. G. BRAINERD, A.B., M.D., PROFESSOR OF MENTAL AND NERVOUS DISEASES, COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA.

TREATMENT OF EPILEPSY, WITH ESPECIAL REFERENCE TO THE USE OF OPIUM.—Joseph Collins, (Medical Record, September 22, 1894.) About a year ago, Professor Flechsig, of Leipzig, published a short article on a new method of treating epilepsy, which in his hands, had given most gratifying results. It consists in administering opium in the shape of the extract or pill in large doses for a period of six weeks. The dose of opium in the beginning is from one-half to a grain, and this is gradually increased until the patient is taking about fifteen grains a day in doses of from one to four grains, The maximum dose is reached by the end of the first week. At the end of six weeks the opium is stopped suddenly, and for it bromide of sodium or potassium, in doses of one-half drachm four times daily is substituted. After these large doses of bromide have been kept up for some time the dose is gradually decreased until the patient is taking less than two scruples a day. The sudden cessation of administering the opium and the exhibition of the bromide is quite essential.

Notwithstanding the fact that no sinister results accompanied the administration of opium in such large doses, still, it should be stated that anyone who would apply this plan of treatment must be watchful and scrutinizing, especially during the first week, until the patient becomes accustomed to the large doses.

The most satisfactory results were obtained in very chronic epileptics and particularly those who were not responsive to large quantities of bromide. In epilepsy dependent on or associated with gross organic lesion of the brain the treatment seemed to give better results than in pure idiopathic epilepsy. By gross organic lesion is meant epilepsy associated with defective development.

The writer sums up his conviction as follows:

1. The plan suggested by Flechsig is not a specific in the treatment of epilepsy.

2. In almost every case in which this plan of treatment has been tried there has been a cessation of the fits for a greater or less time.

3. A relapse generally occurs in a period of a few weeks to a few months.

4. The frequency of fits after the exhibition of opium is, for the first year at least, lessened more than one half.

5. The attacks occurring after the relapse are much less severe in character than those that the patient has been accustomed to having.

6. This plan of treatment is particularly valuable in ancient and intractable cases.

7. In recent cases of idiopathic epilepsy it cannot be recommended.

8. The opium plan of treatment is an important adjunct to the bromide plan as ordinarily applied.

9. The opium acts symptomatically and merely prepares the way for and enhances the activity of the bromide and other therapeutic measures.

10. This plan of treatment permits the use of any other substances which are known to have a beneficial action in epilepsy.

CORRESPONDENCE.

LICENTIATES OF THE CALIFORNIA STATE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners of the Medical Society of the State of California, held May 7, 1895, the following certificates were granted:

ALEXANDER, LEE M., 4032, Fresno, Medical Department Columbian College, D. C., March 1, 1860.

ARMSTRONG, JOHN M., 4033, Los Angeles, Medical Dept. University Michigan, June 23, 1885.

BEATTIE, DAVID, 4034, Santa Clara, University of Toronto, Canada, April 16, 1892; University Trinity, Coll,. Canada, May 6, 1892; College of Physicians and Surgeons, Canada, May 31, 1892.

FLAGG, CHARLES E. B., 4035, U. S. Army, Medical Dept. State University, Georgia, March 3, 1890.

FLAGG, JULIA HIBBEN, (*nee* HIBBEN) 4036, Medical College of Indiana, February 28, 1890.

FREIDAY, WM. G, 4037, Redlands, Jefferson Medical College, Pennsylvania, April 3, 1889.

JOHNSTON, GEORGE W., 4038, Los Angeles, Bellevue Hospital Medical College, N. Y., March 1, 1872.

KOHN, M. E., 4039, San Francisco, Cooper Medical College, Cal., December 6, 1894.

LILLIE, WM. A., 4040, Cucamonga, Bellevue Hospital Medical College, N. Y., March 25, 1895.

MCINTIRE, BYRON, 4041, Rocklin, Long Island College Hospital, N. Y., March 13, 1890.

MOULTON, EDWARD SEYMOUR, 4042, Oakland, Medical Dept. Yale College, Conn., June 27, 1894.

MULLER, OTTO JOHN, 4043, San Francisco, Long Island College Hospital, N. Y., October 10, 1886.

PAGE, SOLOMON C., 4044, Hanford, St. Joseph's Colllege of Physicians and Surgeons, Missouri, March 2, 1880; Medical Department University Louisville, Kentucky, March 1, 1887.

ROSS, JOSEPH BERNARD, 4045, San Francisco, University of Wurzburg, Germany, July 27, 1892.

ROSSI, M. ANDREA, 4046, San Francisco, University of Naples, Italy, September 15, 1892.

STEPHENS, CHAS. R., 4047, So. Pasadena, Bellevue Hospital Medical College, N. Y., October 1, 1874.

THOMPSON, JESSE E., 4048, Placerville, St. Louis College of Physicians and Surgeons, Missouri, March 2, 1880.

TYRRELL, FREDERICK D., 4049, Sacramento, Bellevue Hospital Med. College, N. Y., March 25, 1895.

WYNNE, SYDNEY YALE, 4050, Redlands, Harvard Medical College, Mass., June 27, 1894.

REFUSED.

TAGGART, H. W., Stockton.

CHAS. C. WADSWORTH, M. D., Secretary.

FOUR YEARS' COURSE. A resolution was adopted appealing to American Medical colleges to adopt a four years' course of study and deploring the efforts made to lessen the requirements.

The recent observation of many investigators in both Europe and American that glycerine is the most active desolvent of lithic calculi in the liver, kidney and bladder, demonstrates the wisdom of the use of Codliver Glycerine in these condition; because it is a strong tissue builder as well, and these cases are usually much emaciated.

AMERICAN MEDICAL ASSOCIATION NOTES.

A National Bureau of Health. Dr. Donald Maclean, president, in his address, said: "A national bureau of health, superintended by a competent medical authority, who shall be a member of the cabinet, could not fail to secure for the nation benefits beyond the language of dollars and cents to express. The party, professional or political, which shall succeed in consummating this wise measure, will earn for itself the gratitude and applause of an appreciative nation." This part of the address, was, by vote of the association, referred to the national authorities.

Appendicitis. Dr. John B. Deaver of Philapelphia, in a paper on Appendicitis, said that when the disease was suspected a diagnosis should be made and the operation performed before the end of the first twelve hours.

"Dr. Tom Reed." Dr. Eugene S. Talbot, of Chicago, bears such a resemblance to a famous politician that he has been dubbed "Dr. Tom Reed." He is lighter than the heavy-weight republican from Maine but the likeness in point of facial expression and gait is striking.

Cases of Blindness. Dr. Lucien Howe, of Buffalo, Chairman on legislation of section on ophthalmology, reported a recommendation, which was adopted, to petition State Legislatures to enact laws to reduce the number of cases of blindness by a provision requiring a report of all cases of eyes infected at birth. It was stated that, in eight cases where this law is in force, the number of cases was greatly reduced.

A New Anesthetic. Dr. H. V. Wurdemann of Milwaukee, Wis., first made use of the anesthetic about six months ago and has since operated sixty times without the patients suffering pain. He uses a watery solution of salt. Pure water is painful and a salt solution equal to that of the blood has no effect. A solution in strength half way between the two, he says, will stop the pain of a formidable operation like opening the abdomen or amputating a limb. The method has recently been used successfully by physicians in the West.

Antitoxin Indorsed. Dr. Louis Fischer, in the section on diseases of children said: "There has been a reaction in favor of antitoxin. Scepticism has existed before mainly because of the failure of tuberculin. The majority of failures with antitoxin were really brought about by the use of blood serum which did not contain antitoxin at all. If used immediately after the appearance of the first symptoms of diphtheria, it is claimed that this new discovery will cure every case. Where intubation or tracheotomy have been performed the results have been much better than attained by any other hitherto known treatment. Previously the mortality has been between twenty-five and forty per cent. in all epidemics, severe or mild. With the introduction of antitoxin this high rate has been reduced to from twelve to fifteen per cent."

Alcohol in Medicine. Dr. N. S. Davis is the oldest member of the association, having joined at its organization, forty-six years ago and he is still active in the business proceedings. He read a paper entitled "Does alcohol ever act as food or as a generator of any natural force in the living

body?" Various medical authors and experimenters, said he, have made continual and reiterative statements that alcohol produced heat; was a conservator of tissues and a generator of vital force. It was his opinion that alcohol does not undergo molecular change in the stomach, and that it does not go, therefore, into the blood nor act as a tissue-producing substance. On the contrary, it lowers the temperature of the body, retards and diminishes certain necessary bodily processes and functions. It perhaps retards tissue-waste, but this is not equivalent to tissue-building or nutrition. Men have been kept alive on water for forty or fifty days, but he had not found an instance of a man being sustained for half that time on diluted alcohol. The forces, vital, motor, heat, nerve and muscular, are all subject to impairment through its use. Authorities in view of these facts, entertained convictions that alcohol cannot act as food for the body.

Hypnotism in the Management of Inebriety. Dr. T. D. Crothers, of Hartford, Conn., summarized his views: "The inebriate is a neurotic and and not a good subject when under the influence of spirits and drugs. After their withdrawal, a period of marked instability seems most favorable for suggestion. This will be transient unless followed with persistence.

Experience points to the wide, extended influence of hypnotism in inebriety although not known as such, in the psychical force of public meetings and the power of dominant ideas impressed with emphasis on the mind. Clinical experience furnishes many facts which seem to prove that in certain cases its value is very marked, also promising greater results from more exact studies. Evidently hypnotism is yet to be studied and tested by the same methods applied to all thrapeutic agents. So far its value in inebriety is established; to what extent and how far it can be used are to be settled by future observers.

Preventable Deafness. Dr. Jas. G. H. Nichols of New York, presented a paper before the section of Laryngology and Otology on "Preventable deafness and its influence on career." He said in part: The State has the right and duty to supervise the health of its citizens. The physical condition of school children should be inquired into as well as their intellectual, at the start and at regular intervals thereafter by examiners attached to the school-board. This is not for treatment, but as a matter of record and to properly notify the parents or guardians. This qualified medical man should be on hand at the day of school registration of the pupils, to examine them as to their vision, hearing, the condition of their nose and throat, freedom from contagious disease and habits of cleanliness. Blanks should be filled out if treatment is needed. He should also supervise the heating, lighting and ventilation of school-rooms and should have power to enforce his recommendations in this respect. At stated intervals, he should give instructions to the pupils and by circulars to the parents in regard to care of the eye, ear, nose and throat and general hygiene." These suggestions were endorsed by the section and the members urged to press the matter in the various State Legislatures.

SOUTHERN CALIFORNIA PRACTITIONER.

A MONTHLY JOURNAL OF MEDICINE AND ALLIED SCIENCES.

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Editors and Publishers Southern California Practitioner,
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Communications are invited from physicians everywhere; especially from physicians of the Pacific Coast, and more especially from physicians of Southern California and Arizona.

EDITORIAL.

THE DOCTOR'S HORSE.

He is not a bicycle. The general practitioner cannot entirely depend upon the silent steed. Therefore he must have a horse. His horse must be neither white nor black, because these are the colors preferred by the sleek and solemn undertaker. The doctor does'nt want his horse to lose its identity and be mistaken for the stately steed that is wont to be seen in front of the esthetic and inviting funeral parlors. Did you ever notice that the white or the black horse of the undertaker gets the same solemnity of mien and the same financially sympathetic glance of the eyes that is peculiarly noticeable in his owner.

We began though to speak of the "Doctor's Horse" and we must keep to our text. This horse must be chestnut, brown or bay and weigh eleven or twelve hundred pounds. Less than that is undignified; more than that would be to heavy for hard drives. He should be spirited and yet not afraid of the steam car, trolley or wheel. He should have a broad forehead and ears that bend to the front.

Make this horse one of your family, see that your hostler and coachman do their work as well as the nurse girl does hers. Remember, there is more in your horse than simply what you can get out of him by driving, there is intelligence there and possible loyalty and love. If you have an

overcheck on your horse have it unfastened always when you stop to see a patient. Charity (love) begins at home and the doctor's horse is undoubtedly an integral part of the household.

He soon acquires an interest in his owner's business and, when he hears the night bell, jumps up quickly, ready to be harnessed. Without being guided he turns in and nearly stops at the patient's house. He waits patiently at the door until the doctor comes out. A good, sympathetic horse greets his master with a smile as he comes from the sick room. This horse appears to know whether the case is serious or not and shakes his head ominously when his master is long detained. There is often a similitude between the doctor and his horse which we shall speak of later.

CHRISTIAN SCIENCE.

The death of a woman suffering from puerperal mania in the town of Whittier, twelve miles from Los Angeles, brings before us vividly the criminal malpractice of the alleged Christian Scientist. We say "alleged" because these dangerous people are rarely christians and never scientists.

In this case at Whittier the mother lay for weeks after childbirth suffering from septic fever and delirium yet the husband would not call in a physician, depending entirely upon christian (?) science (?).

The courts we believe are taking some cognizance of the matter but we predict that the only persons to receive punishment will be the poor, motherless children, who, through the terrible delusion of their father, are thus left to buffet with the world.

COMMENCEMENT AT THE MEDICAL COLLEGE.

Commencement exercises of the Medical College of the University of Southern California will take place, Tuesday evening, June 4th, at the Los Angeles Theater. Ten of the senior class having successfully passed their examinations will receive their diplomas. This is the largest class ever graduated, one more than the best class of '88. The successful candidates were Mrs. Iola M. Colburn, Ralph M. Hagan, Geo. A. Hawkins, Joseph M. King, Miss Ida B. Parker, Samuel F. Smith, Frank S. C Tate, Alexander M. Tuthill, Geo. B. Walrath and Wm. H. Waston. The PRACTITIONER wishes each and every one success. Drs. M. L. Moore and W. D. Babcock will deliver addresses on behalf of the faculty; this commencement promises to be of much interest to all concerned. The property of the college is assured, the number of students shows a steady increase, with an increasing ratio. The stock has already been subscribed by members of the faculty to build a new medical college, a substantial brick structure which will be commenced immediately after the location is determined upon.

The faculty, the alumni, the students and the professors of Los Angeles are alike pleased at the prosperity of the college and the prospect soon of having a well equipped modern building. The college proposes to keep in the front rank as to requirements insisting on full and constant attendance on all lectures and clinics during a *four years'* course.

SOUTHERN CALIFORNIA MEDICAL SOCIETY.

The program for the coming meeting of the Southern California Medical Society promises to be of more than usual interest—both medically and socially. The second day's session at Catalina ought to be a drawing card. The city of Los Angeles has, according to this year's school census, a population of at least 80,000, and among them there are fully three hundred regular physicians; half of that number at least, should come out. Those in the city, can attend to business and the sessions as well except on Thursday. The Catalina trip ought to be enjoyed by all, the newcomers as well as the old "standbys."

Good fellowship, professional advancement, mental improvement and patriotic home-feeling should incite each physician to be present at as many of these meetings as possible. Those who are but recent arrivals should, by all means, associate themselves with this society, for it is practically a state organization, California being so large that the State Society comes south but once in half a dozen years; while in this association we may meet twice in each year, without great loss of time or the expense of a long trip. It is to be hoped that there will be a large accession to the membership at this meeting. Remember the dates, June 5th and 6th.

OFFICERS:

President, P. C. Remondino, M.D., Vice Presidents, F. F. Rowland, M.D., D. W. Mott, M.D., Secretary, Geo. L. Cole, M.D.

COMMITTEE OF ARRANGEMENTS:

Drs. W. W. Hitchcock, Ross C. Kirkpatrick, F. W. Steddom.

WEDNESDAY, JUNE 5TH.

2 P. M. SHARP.

Call to Order. Minutes. Report of Officers. Applications for Membership. Appointment of Committees. Address of Welcome—Mayor Rader, Dr. W. W. Hitchcock. Response—Dr. P. C. Remondino.

Therapeutics—Dr. J. M. Hurley, Chairman.—Malaria—Its attack upon the Animal Economy—Its Prophylaxis, and the Various Remedial Agencies used, Past and Present.

Dr. C. N. MacKechnie,—Anti-Toxines and Their Uses.

Dr. Geo. B. Rowell,—Chronic Arsenical Poisoning, with presentation of case.

Obstetrics—Dr. Walter Lindley, Chairman.—Obstetric Commonplaces.

Dr. Anne W. Nixon,—Ergot's Place to-day in Obstetrics.

Surgery—Dr. E. A. Praeger, Chairman.—Surgery of the Gall Bladder.

Dr. J. T. Stewart,—Relation of Surgery to Society.

Dr. R. J. Hall,—Craniectomy for Epilepsy and Allied Diseases of the Brain.

Nervous Diseases—Dr. F. D. Bullard, Chairman.—Cerebral Syphilis.

Dr. H. G. Brainerd.—Cerebral Tumors.

7:30 P M.

Genito-Urinary—Dr. J. G. Baird, Chairman.—Urinalysis.

Ophthalmology and Otology—Dr. R. W. Miller, Chairman.—Morbid Appearances of the Tympanic Membrane, and Their Significance.

Dr. A. L. Macleish,—Keratoplasty.

Pediatrics—Dr. Theoda Wilkins, Chairman—Bath Treatment of Young Children in Pneumonia.

Noes and Throat—Dr. E. W. Fleming, Chairman.—Demonstration of Specimens of the Nose and Throat.

Dr. W. D. Babcock,—Diagnosis of Diseases of the Accessory Sinuses of the Nose; Ethmoidal and Sphenoidal.

The second day's session will be held on Catalina Island. Special train leaves Arcade Depot at 9 a.m.

Excursion rate, including passage on Hermosa, fifty cents for round trip.

THURSDAY, JUNE 6TH.

Address of Welcome at Catalina—Capt. J. B. Banning. Election of Officers.

Practice—Dr. F. R. Burnham, Chairman.—The Hygiene of Childhood.

Dr. Norman Bridge,—A Little Understood form of Pneumonia.

Some Painful Disorders—possibly reflex—of Abdominal Nerves, often Simulating Malignant Disease.

Dr. Albert M. Jones,—Hemorrhage of Stomach from Cirrhosis of Liver, with Report of Cases.

Gynecology—Dr. John R. Haynes, Chairman.—Prevention of Lacerations of Puerperal Tissues During Labor.

Dr. D. B. Van Slyck,—Remarks on Certain Gynecological Procedures.

Dr. Francis L. Haynes,—Repair of Recent Lacerations of Puerperal Tissues.

Volunteer Papers—Dr D. G. MacGowan.—The Differential Diagnosis of Addison's Disease from the Pigment Affections of the Skin, with presentation of a case.

Report of Some interesting Cases of Surgery of the Bladder.

POMONA MEDICAL SOCIETY.

We are always glad to note evidences of progress in the profession as manifested in the organization of Medical Societies. The youngest heard from is the one organized last month at Pomona, with fifteen members and prospects of more at the May meeting; the membership is not confined to Pomona but includes physicians from adjoining towns.

Their officers are: president, Dr. C. W. Brown, Pomona; vice-presidents, Dr. Idris B. Gregory, Ontario, and Dr. W. M. Amos, Lordsburg; secretary, Dr. H. S. Gordon, Pomona; and treasurer, Dr. W. H. Charlesworth, Pomona.

The meetings will be monthly; constitution and by laws, the same as the County Society's, with a few changes to suit the different local bearings. A paper on Herpes by Dr. Theoda Wilkins and one on Glaucoma by Dr. H. S. Gordon will be read at the May meeting. We extend our best wishes and heartiest welcome to the new society.

EDITORIAL NOTES.

We are indebted to Dr. J. H. Parkinson, editor of the *Occidental Medical Times* for abstracts of the State Medical Society Proceedings.

Dr. Mary E. Hagadorn has returned with improved health from El Paso, Texas, and is now practicing at 11 S. Euclid Ave., Pasadena.

Dr. E. A. Candee has opened an office in Bakersfield.

Dr. J. H. Gentry, lately from Missouri, has located in Phœnix, Ariz.

Dr. J. C. House recently of Port Townsend, has gone to Bakersfield to remain permanently.

Dr. J. N. Conley of San Luis Obispo, has removed to Guadalupe and opened an office there.

Dr. H. S. Gordon, Pomona, will have charge of the practice of Dr. Henderson, during the latter's absence.

Dr. and Mrs. F. F. Rowland have gone east for a month or six weeks. The doctor went for the purpose of settling up his father's estate.

The board of Supervisors of Riverside county are looking up a new hospital location. The lease on the present hospital expires August 1st.

We are pleased to chronicle the recovery of Dr. J. E. Cowles, from a severe attack of Erysipelas; he is now rusticating at Arrow Head Springs.

Dr. Hearne of San Diego has begun another libel suit against the Chronicle, for an article defamatory to his character. The amount sued for is $100,000.

Dr. W. B. Wood of Orange, Cal., has been appointed assistant general medical examiner for the Fraternal Aid Association for this coast, includ-California, Oregon and Washington.

Drs. W. LeMoyne Wills and H. Bert Ellis represented Los Angeles at the Baltimore meeting. Dr. Wills has two months' vacation, while Dr. Ellis expects to return by June 1st.

The Association of American Medical Editors, at the Baltimore meeting, elected the following officers: President, Dr. George M. Gould, Philadelphia; treasurer, Dr. Ohman Dumesnil, St. Louis; secretary, Dr. H. Bert Ellis, Los Angeles.

The profession of Los Angeles and the people of East Los Angeles met with unexpected and great loss in the sudden death of Dr. E. T. Shoemaker, the 18th of this month. Dr. Shoemaker came to Los Angeles in 1877, and has always been held in the highest esteem by his colleagues and patients.

The American Medical Association honored the veteran practitioner, R. Beverly Cole of San Francisco, by electing him President. Dr. Cole will make an able and dignified officer, and California feels complimented in the selection of one so long indentified with her professional life, as the president of the association.

Dr. S. Kenosha Sessions, of Evansville, Ind., who has had charge of her brother's practice at Hueneme during the latter's absence on a five month's camping trip, is spending a few weeks in the city, as the guest of Mrs. W. G. Kerckhoff. Thursday evening, May 16th, a number of our women physicians were kindly invited by Mrs. Kerckhoff to meet Dr. Sessions and a very enjoyable evening was spent.

PAMPHLETS RECEIVED.

THE TREATMENT OF EMPYEMA, WITH SELECTED CASES. By J. William White, M.D., Professor of Clinical Surgery in the University of Pennsylvania, and Alfred C. Wood, M.D., Assisstant Surgeon to the University and Gynecean Hospitals, Philadelphia. Reprinted from The Therapeutic Gazette, August 15, 1894.

CHAIRMAN'S ADDRESS. READ IN THE SECTION ON OBSTETRICS AND DISEASES OF WOMEN. By Joseph Eastman, M.D., L.L.D., Indianapolis, Ind. Reprinted from the Journal of the American Medical Association, August 4, 1894.

A CASE OF CHRONIC PERITONITIS, WITH INTESTINAL AND ABDOMINAL FISTULAE—ENTERORRHAPHY—RECOVERY. By Frederick Holme Wiggin, M.D., President of the Society of Alumni of Bellevue Hospital, etc. Reprinted from the Medical Record, August 11, 1894.

COELIOTOMY FOR BILATERAL PYOSALPINX, FOLLOWED FOUR DAYS LATER BY APPENDICITIS, OPERATION, RECOVERY. A CASE OF BILATERNAL OVARIAN FIBRO-SARCOMA. By the same author as the above. Reprinted fro n the New York Medical Journal for February 10 and April 7th.

DIARRHEA FROM POTASSUM IODID. By Douglass W. Montgomery, M.D., Professor of Diseases of the Skin, Medical Department of the University of California, San Francisco. Reprinted from the Medical News, December 29, 1894.

STOMATITIS NEUROTICA CHRONICA. By A. Jacobi, M.D., Clinical Professor in the College of Physicians and Surgeons, New York. Reprinted from the transactions of the Association of American Physicians.

NTRALIGAMENTOUS AND RETROPERITONEAL TUMORS OF THE UTERUS AND ITS ADNEXA. By William H. Wathen, A.M., M.D., Professor of Abdominal Surgery and Gynecology in the Kentucky School of Medicine, etc. Reprinted from the transactions of the American Gynecological Society.

THE PRESENT CONDITION OF LEGISLATION FOR THE PREVENTION OF BLINDNESS. By Lucien Howe, A.M., M.D., Buffalo, N. Y. Reprinted from the Bulletin of the American Academy of Medicine, No. 23.

VAGINAL HYSTERECTOMY. A Report of Ten Consecutive Successful Cases done in the Present Year. By William Henry Mays, M.D., President of the San Francisco Gynecological Society, etc.

OPERATIVE TREATMENT OF MYOFIBROMA ULTERI. By N. Sen, M.D., Ph.D., L.L.D., Professor of Surgery in Rush Medical College, etc. Reprinted from The Chicago Medical Recorder, June, 1894.

REPORT OF THE SURGEON-GENERAL OF THE ARMY TO THE SECRETARY OF WAR FOR THE FISCAL YEAR ENDING JUNE 30th, 1894. Washington: Government Printing Office. 1894.

BOOK REVIEWS.

DOSE BOOK AND MANUAL OF PRESCRIPTION WRITING, WITH A LIST OF THE OFFICIAL DRUGS AND PREPARATIONS, and also many of the newer remedies now frequently used with their doses. By E. Q. THORNTON, M.D., Ph.G., Demonstrator of Therapeutics, Jefferson Medical College of Philadelphia; Acting Assistant Surgeon United States Marine Hospital Service. Philadelphia. W. B. Saunders, 925 Walnut St. 1895. Price $1.25.

There are four parts in this book. Part I, Weights and Measures. Part II, Prescription Writing, including instructions how to formulate, as well as directions how to avoid incompatibility, also a good table of solubilities. Part III, Official Preparations and Methods of Prescribing. Part IV, Drugs, and the main body of the work alphabetically arranged, official and officinal drugs and preparations.

The list employed is both extensive and modern—the latter quality marks the work as a very important addenda to the U. S. Pharmacopœia and Dis-

pensatory. The entire list of coal tar products and the thousand and one preparations used by the up to date physician, such as subgallate of bismuth, pellatierine tannate, lactate of strontium, diuretin, etc., are considered.

As this book deals only with drugs, the questions of serum therapy and animal extracts are entirely omitted. This book can not fail to be of value to the undergraduate and to the young practitioner—indeed, to the old physician who desires to be always fresh. A special good feature about this work is that it cannot be abused—it fills its particular place, but the student must look elsewhere for his therapeutics. Our verdict of it is: safe, convenient, sufficiently extensive and modern, and will take a good position among works of a similar character.

INTERNATIONAL CLINICS—A QUARTERLY OF CLINICAL LECTURES ON MEDICINE, NEUROLOGY, SURGERY, GENITO-URINARY SURGERY, GYNÆCOLOGY, OBSTETRICS, OPHTHALMOLOGY, LARYNGOLOGY, PHARYNGOLOGY, RHINOLOGY, OTOLOGY, AND DERMATOLOGY, by Professors and Lecturers in the leading medical colleges of the United States, Germany, France, Great Britain and Canada. Edited by JUDSON DALAND, M.D. (Univ. of Penna.), Philadelphia, Instructor in Clinical Medicine and Lecturer on Physical Diagnosis in the University of Pennsylvania, etc.; J. MITCHELL BRUCE, M.D., F R.C.P., London England, Physician to and Lecturer on the Principles and Practice of Medicine in the Charing Cross Hospital; DAVID W. FINLAY, M D., F.R.C P., Aberdeen, Scotland, Professor of Practice of Medicine in the University of Aberdeen, etc. Vol. I., Fifth Series. 1895. Philadelphia: J. B. Lippincott Company.

One of the editors, Finlay, writes the first article, in which he favors small doses, 3 grains, of acetanilid every 3 or 4 hours in typhoid fever, whenever the temperature is 103 F. or over. Van Noorden, of Frankfort-on-the-Main, next advocates persistent feeding of diseased people—claiming that a patient confined to his bed needs about four-fifths as much food as he would require if walking about. Sansom, of London, treats in the third article of complicated rheumatism, and dwells on the fact that not all joint inflammations are of rheumatic origin. Anderson, of Philadelphia, then gives a detailed account of a complicated case of typhoid fever, in which he depended, when threatened with collapse, on strychnine, $\frac{1}{15}$ of a grain every two hours. As the International clinics cover the whole range of medicine it would be inadvisable if not impossible within the allotted space to even mention the articles. The main feature of the work is its practicability. Long winded articles as to theory, etc., are tabooed in such books as these.

In no way can a physician be a ready diagnostician except by having at hand good clinical knowledge. This can be obtained par excellence only in actual practice, as far as book lore is concerned such can best be derived from clinical literature which applies didactic conclusions directly to actual cases. This is just what International clinics do, one does not have to wait a year, but has the clinical pabulum served each quarter. The illustrations and general make-up show improvement on the previous series, the book presenting a more pleasing appearance than last year.

FREE OF CHARGE:—The therapeutics of Peroxide of Hydrogen (medicinal), Glycozone and Hydrozone, by Charles Marchand, Chemist. Ninth Edition. This book of 200 pages, which contains all information on the subject, with reprints of elaborate articles by leading contributors to Medical Literature, will be mailed to doctors mentioning this publication. Send full address to Charles Marchand, 28 Prince Street, New York.

MONTHLY METEOROLOGICAL SUMMARY.

U. S. WEATHER BUREAU, LOS ANGELES STATION.

Los Angeles, California. *Month of April, 1895.*

Date	TEMPERATURE Max.	Min.	Mean	Precipitation in inches and hundredths
1	69	45	57	0
2	70	44	57	0
3	64	45	54	0
4	71	49	60	0
5	74	43	58	0
6	75	46	60	0
7	82	50	66	0
8	76	44	60	0
9	67	41	54	0
10	68	41	54	0
11	71	44	58	0
12	78	50	64	0
13	72	46	59	0
14	68	48	58	.11
15	70	45	58	0
16	75	44	60	0
17	74	46	60	0
18	70	50	60	0
19	67	53	60	.02
20	70	54	62	0
21	68	54	61	0
22	70	53	62	T
23	60	53	56	.04
24	62	52	57	T
25	62	52	57	0
26	64	51	58	0
27	66	50	58	.25
28	61	52	56	.04
29	68	51	60	0
30	70	49	60	0
31				

SUMMARY

MONTHLY RANGE OF BAROMETER:

Mean Barometer, 30.03.
Highest barometer, 30.23, date 6.
Lowest barometer, 29.84, date 18.
Mean Temperature, 59°.
Highest temperature 82°, date 7.
Lowest temperature 41°, date 10.
Greatest daily range of temperature 32°, date 7.
Least daily range of temperature 7°, date 23.

MEAN TEMPERATURE FOR THIS MONTH IN

1877	59°	1883	58°	1889	62°
1878	59°	1884	59°	1890	59°
1879	60°	1885	63°	1891	59°
1880	57°	1886	59°	1892	59°
1881	63°	1887	60°	1893	58°
1882	58°	1888	63°	1894	59°
				1895	59°

Mean temperature for this month for 17 years, 60°
Total deficiency in temp. during the month, 1.2°
Total deficiency in temp. since Jan. 1, 66°
Prevailing direction of wind, West.
Total movement of wind, 2726 miles.
Maximum velocity of wind, direction, and date, 24m, N.W., 5th.
Total Precipitation, .46 inches.
Number of days on which .01 inch or more of precipitation fell, 6.

TOTAL PRECIPITATION FOR THIS MONTH IN

1878	1.71	1884	3.58	1890	.22
1879	1.19	1885	2.01	1891	1.26
1880	5.06	1886	3.32	1892	.22
1881	.46	1887	2 30	1893	.19
1882	1.83	1888	.12	1894	.13
1883	.15	1889	.27	1895	.46

Average precip'n for this month for 17 years, 1.71.
Total excess in precip'n during month 1.25.
Total precip'n from Sept. 1,'94, to date, 15.90 inch.
Averge precip'n from Sept. 1,'94, to date, 17.81 inch.
Total deficiency from Sept. 1,'94, to date, 1.91 in.
Average rainfall for 10 wet seasons, 21.58 inches.
Number of clear days, 10.
" partly cloudy days, 10.
" cloudy days, 10.

NOTE—Barometer reduced to sea level. "T" indicates trace of precipitation.

METEOROLOGICAL SUMMARY SOUTHERN CAL., APRIL, 1895.

STATIONS	TEMPERATURE Mean	Max.	Min.	Mean Barometer	Relative Humidity	RAINFALL Days	Am't	WEATHER Clear	Fair	Cl'dy	WIND Direc-tion	Total Mov't
Los Angeles	59.	82.	41	30.03	74.	6	.46	10	10	10	W	2,726
San Diego	58.	81.	44.	30.04	...	2	.11	15	11	4	W	3,145
Santa Barbara	57.5	78.5	43.	...	72.	3	.46	19	1	10	W	2,904
Yuma	70.	98.	45.	29.90	36.	0	.00	26	4	0	W	5,225
Arlington Heights	59.	87.	38.	.....	....	....	....	19	4	7	W	.....
Ontario	63.	85.	50.	.....	.....	3	0.83	15	7	8	W	.....
Pasadena	58.	81.	40.	.....	.....	0	0.61	14	5	11	SW	.....
Redlands	62.	88.	59.	.....	.....	0	0.	....	....	....	W	.....
San Bernardino	.....	.....	.....	.....	....	....	.....	....	....	....	.....	.....
Santa Ana	64.	86.	50.	.....	.....	....	0.60	....	....	....	W	.....

OBSERVERS.—George E. Franklin, U. S. Weather Bureau, Los Angeles; M. L. Hearne, U. S. Weather Bureau, San Diego; Hugh D. Vail, Santa Barbara; A. Ashenberger, U. S. Weather Bureau, Yuma. JAMES A. BARWICK, Director California Weather Service, Sacramento, Cal.

REGISTERED MORTALITY OF LOS ANGELES.

WITH SEX AND NATIVITY OF DECEDENTS.

Estimated Population, 75,000. *April, 1895.*

CAUSE OF DEATH	Total Deaths	Annual rate per 1000	SEX		NATIVITY				RACE		
			Male	Female	Los Angeles	Pacific Coast	Atlantic States	Foreign Born	Caucasian	African	Mongol
Deaths from all causes	119	19.04	75	44	19	8	58	34	117		2
Deaths under 5 years	19										1
i. Specific infectious diseases	28		18	10	6	5	12	5	27		
ii. Diseases of digestive system	12		3	9	3		5	4	12		
iii. Diseases of respiratory system	26		17	9	2	1	17	6	25		
iv. Diseases of nervous system	6		3	3	2		2	2	6		
v. Diseases of circulatory system, blood and ductless glands	14		13	1	1		6	7	14		
vi. Diseases of genito-urinary org'ns	5		4	1			2	3	5		
vii. Constitutional diseases	3			3			3		3		
viii. Intoxication, violence, accidents	12		10	2	1	1	7	3	12		
ix. Miscellaneous diseases	13		7	6	4	1	4	4	13		
Septicæmia	1			1			1		1		
Pyæmia											
Diphtheria	1		1			1			1		
Erysipelas											
Typhus fever											
Typhoid fever	6		2	4	1	2	2	1	6		
Malaria fever											
Scarlet fever											
Measles											
Cerebro-spinal meningitis	5		5		3	1		1	5		
Smallpox											
Tuberculosis	9		5	4		1	6	2	8		1
Influenza	3		3		2				3		
Dysentery											
Syphilis	1		1					1	1		
Tetanus	1			1			1		1		
i. Diseases of the œsophagus											
Gastritis	3		2	1	2		1		3		
Gastro-enteritis											
Cholera infantum	1			1	1				1		
Enteritis	1			1				1	1		
Appendicitis	1			1			1		1		
Intestinal obstruction	1			1			1		1		
Diseases of liver	3		1	2			2	1	3		
Peritonitis											
iii. Membranous croup											
Bronchitis	3		2	1	1		2		3		
Pneumonitis	4		4		1	1	1	1	4		
Pleuritis											
Phthisis	19		11	8			14	5	18		1
iv. Diseases of brain	5		3	2	1		2	2	5		
Diseases of spinal cord											
Eclampsia											
Epilepsy											
v. Diseases of heart	13		12	1	1		5	7	13		
Degeneration of arteries	1		1				1		1		
Aneurism											
Anæmia											
vi. Uræmia											
Acute Bright's disease											
Chronic Bright's disease	2		2				1	1	2		
Diseases of genital-organs	3		2	1			1	2	3		
vii. Rheumatism											
Gout											
Diabetes											
Inanition											
Senility and Asthenia	3			3			3		3		
viii. Alcoholism	1		1				1		1		
Opium habit											
Suicide	5		3	2			5		5		
Violence and accidents	6		6		1	1	1	3	6		
ix. Tumors—malignant	3		1	2			1	2	3		
Tumors—non-malignant	3		2	1			1	2	3		
Other diseases	7		4	3	1	1	2		7		

F. W. STEDDOM, M.D., Health Officer.

OUR ADVERTISERS.

A SIGNIFICANT FACT.

According to no less authority than Moleschott, the ideal diet for the human adult comprises twice as much starch or other carbo-hydrates, as all meats, fats and salts combined. It is a well known fact that starch is first changed by digestion into a peculiar form of sugar, and finally into fat. It is thus the fuel of the body. This information, while in no sense new, is worthy of careful thought and study. What physician has not repeatedly asked himself the questions, "How can I put flesh on this patient's bones?" or, "How can I stop the continual loss in weight, which can have but one end?"

It is fat that such patients need, and it avails nothing to give them foods which are either indigestive or offensive to the palate. This precludes the use of cod liver oil and other fats, as well as most forms of starch, for patients of the type described are almost invariably troubled with impaired digestion, and whenever starches fail to properly digest they undergo rapid fermentation, thus setting up a chain of secondary disorders which are quite as annoying as the original disease.

It is for this reason that Paskola promises to be such a valuable addition to the Materia Medica. Its basis is an artificially-digested starch, which presents fuel to the body in a readily assimilable form. It conserves energy by relieving the system of the necessity of digestive effort, and by the happy combination with it of a small proportion of hydrochloric acid, the natural acid of the gastric juice, and meat-digesting ferments, it is given a decided value as an aid to the digestion of other foods.

Paskola stands unique among preparations of its class, and has now been on the market long enough to clearly establish its very exceptional value in the treatment of anæmia, general malnutrition or troubles attributable to deranged digestion whether gastric or intestinal.

H. C. Crowell, Kansas City, in *Kansas Medical Journal*, says: In chronic ovaritis, if the cervix is found puffy, enlarged and highly sensitive, the entire infra-vaginal cervix may be penciled over with iodized phenol or the dark Pinus Canadensis (Kennedy's).

Walker Pharmacal Co., St. Louis, Mo.

Gentlemen: Please send me a sample of Pineoline. I have used Phytoline and believe it is the best, and about the *only* medicinal remedy that will reduce a surplus of adipose tissue. I gave it to a lady patient weighing 200 pounds; reduced weight 26 pounds in four weeks; at the same time, gave entire relief to a train of hepatic, gastric and rheumatic symptoms, that had made the patient's life miserable.

Very truly yours,

Olympia, Wash. M. L. ADAMS, M. D.

La Grippe with Scanty Secretion and Retention of Urine.—*Sanmetto* acted very satisfactorily in a case of a lady fifty three years of age suffering from *la grippe*, accompanied with scanty secretion and retention of urine. *Sanmetto* was given in doses of two teaspoonfuls every four hours, and within twenty-four hours her urine was passing freely and without pain.

G. M. LISTON, M. D.,

Filley, Mo. U. S. Exam. Surg.

McIntosh Battery—Attention is called to the advertisement of the McIntosh Battery and Optical Company, page xxiii. This is a well-known, reliable firm and merit your patronage. Send for their illustrated catalogue, free of charge.

Dr. Ben H. Brodnax,—"The Pil Orientalis (Thompson) seems to do its work well, and those who have used it are well pleased with the effects." At another time: "I gave them to a man who was troubled with a lack of erectile power. He is cured, and says he is 'all right.'"

SOUTHERN CALIFORNIA PRACTITIONER.

VOL. X. LOS ANGELES, JUNE, 1895. NO. 6

H. BERT. ELLIS, M.D., F. D. BULLARD, A.M., M.D. } EDITORS AND PROPRIETORS.

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ORIGINAL.

WHY SHOULD CHINESE MEDICINE FIND FAVOR IN THE UNITED STATES? *

BY P. C. REMONDINO, M.D., SAN DIEGO, CAL.

If we wish to study the state of modern Chinese Medicine, we have but to study the condition that our science presented among some of the learned of the fifteenth century of Europe and we need not know either China or its medical practitioner. In many instances the European medicine of that date was somewhat more advanced than the practice of the Chinese of the present, but in a general way the methods and ideas were very much the same—it was the same spiritual or divine origin of disease and of health, mingled with astrology, divination, charms and amulets, with a materia medica, which with its vegetable simples carried along a horrible array of human and animal remains as well as a nauseous array of all the nastiness that can be evolved out of the skatological kingdom. Europeans then enjoyed the same benefit from planetary conjunctions, incantations, charms, and every combination of superstition and of honeyed nastiness that our Chinese brothers have the felicity of enjoying to-day. European restlessness and instability, as well as its spirit of inquisitiveness and investigation, allied to the facilities for separate questioning, experiments, and for the elaboration, and founding of newly discovered principles, made possible by its separation into small states with differently minded rulers, has made of European medicine an eclectic and progressive science. In China, Medicine has fared quite

* Address of the retiring President of the Southern California Medical Society, delivered at Catalina, June 6, 1895.

otherwise, and through the long establishment of the science of writing among the Chinese, we have been enabled to construct the edifice of their science so as to give us a correct account of its history for nearly forty centuries. The history of their science as preserved to us by these records is but one of the details of the history of the general stationariness that the religious conservatism of China has maintained in all things during all these past centuries.

The first infraction into all their stationariness—as preservative of its ancient science and customs as the frozen Siberian north has been of the perfect remains of the pre-historic hairy mammoth—was made by the Jesuit Fathers, who as missionaries and civilizers first landed on the coasts of eastern Asia in the early part of the seventeenth century. In China and in Siam, these devoted men labored for a century and half, backed by the government of France, in their conjoined effort to christianize and civilize these people, and to bring about close commercial relations with their own country. In these efforts, medicine, played an important part, as the Jesuit rightly judged that the practice of intelligent medicine would greatly aid in gaining the confidence and love of these people whose medicine was of no earthly avail when it did not act through the imagination. Of obstetrics, of surgery, of anatomy, of pathology or of physiology, the Chinese were in the most sublime and indifferent ignorance. The Jesuit Fathers instructed them in anatomy, explaining to them, that there could not exist any intelligent medicine without a knowledge of that framework and of that mechanism upon which diseases occurred or upon which medicines were to act, and actually progressed so far as to print and use books on anatomy in the Chinese language. In the death of Kang-hy, a most enlightened and liberal Chinese emperor, China suffered a great loss, and the subsequent regency, fearing the power of the strangers, at once banished them from China. A revolution resulted a little later in their banishment from Siam, and Asia and its medicine again relapsed into its long conservative sleep from which it had but temporarily been awakened.

From Pere Du Halde, the Abbe Grosier and the various Jesuit relations and historians, we have been enabled to form a correct history of Chinese medicine as it has existed for centuries; then we have the valuable translations of Dentrecolles and of Dabry, as well as the records of the various embassies, especially that of Lord Macartney, and the transaction of the Asiatic Society that further enlighten us by detail upon the actual existing state of Chinese medicine, from all of which we have been able to construct its edifice in its entirety, taking it out of the domain of the mysterious or of the hidden. It is from these authentic and reliable records that the following sketch has been prepared, and as the later observations made by various and unprejudiced observers fully bear out the relations made by the Jesuit fathers over a century ago, and as the same Chinese medical text books are still in use as found on the arrival of the first Jesuits, we feel assured we are dealing with the existing facts,

and that we are guarded against any misconceptions or misrepresentations.

Nothing is more educating or enlightening than the study of the History of Medicine: as observed by Sir William Hamilton, the history of medicine is the history of the human species, and the only human history that is uncontaminated by the recitals of those civil discords and fearful atrocities that mar the pages of either social or religious history. The history of medicine is the story of applied moral philosophy and of active and aggressive philanthrophy. There it is, where the highest and best faculties of the human mind can be deployed for the greatest *practical* benefits to mankind. The study of the history of our noble art, is not, however, without its sad glimpses of the undeveloped state of human understanding. Be it that the process of evolution has not as yet placed the mental faculties of the masses where they should be, or that, perhaps, we are never intended to be any better conditioned, we cannot help coming to the conclusion that the mind of even the average of civilized men is in a sadly imperfect state. We have of late even surpassed in realities many of the supposed impossible mechanical creations of Jules Verne, and it may well be a question whether or not we will ever reach that degree of perfect intelligence so beautifully and so graphically depicted in Bulwer's "Coming Race," but for a certainty, we can say that for the present our masses are very far from that perfection; and it seems stranger still, that the benighted and extremely ignorant Asiatic medicine, resting on no scientific or philosophical foundation whatever, and constructed in the main of an incoherent admixture of antiquated, astrological, cosmic, and metaphysical absurdities, only held together here and there by a beam of material common sense, should find a support and patronage in otherwise enlightened America after its absurdities had been noted and so well described by the Jesuits of two centuries ago. It seems inconceivable, that with our great public and high school system, and our free universities and colleges, which permit of no excuse for ignorance, and with all of our great public libraries, and with our great and ubiquitous press, that the great mass of minds has not been better cultivated, and that the brain matter has not been somewhat improved over that of some centuries ago. We should, at least, as a mass, or as a part of the great American nation, not have taken up this, which the Japanese have within the last generation totally discarded, and which the Chinese, who are intelligent, themselves look upon with doubt and distrust. Somehow, it would seem as if to think, to compare, and to analyze, was for the ordinary mind, even the American mind, a task of such magnitude, that the mental efforts required were positively irksome, distasteful and wearying, if not actually impossible; and that the mass, like most savages incapable of thought, prefered a positive submissiveness to superstitious notions, and to being deceived and imposed upon, rather than to make a discriminating mental effort.

Were we to suggest to the average of the American public that they place their anatomies and physiologies into the care and keep of the

revived mediæval medical monks of the monasteries of the tenth and eleventh centuries as being fully intelligent and sufficiently enlightened to attend to their ailments, the average American citizen, proud of his achievements and of his progress, would at once resent such advice as an unmerited insult both to his intelligence and to his progressive spirit. This resentment, however, is only in a collective and in a theoretical sense, as there resides a degree of attractive and irresistible hypnotism or fascination about the solemn-countenanced, mild-eyed and tapering fingered Mongolian medical practitioner, clad in his homogeneous colored oriental garments of sky blue, that are altogether too fetching for the lone and marvel-loving individual, and with all of his enlightment and all of his collected lore on the silver question, on the tariff, and on the Monroe doctrine, his ignorance of the history of medicine, or of the comparative state of the science when contrasted with antiquity, or of the comparative state of the science in separate countries, the otherwise mentally rich American will, nevertheless, place himself in the hands of as cunning, as wily, and as ignorant as well as unscrupulous a lot of oriental practitioners as can double-discount any tenth century medical monk for antiquated ideas, absurdities of medical ideas, or for barbaric therapeutics, as well as for general irrationalism or unmitigated rascalism. That the Mongolian will treat his helpless anatomy with as little commiseration as his brother Mongolian of the Chinese laundry will his shirts, is something that never occurs to him any more than it will occur to him that a medicine that knows no anatomy, physiology, pathology, or surgery, can know but little of any medicine. Unable to discriminate between actual ailments and such as are the creation of suggestion, as well as unable to distinguish between the results of technical treatment and that which results from self or some other form of hypnotism or from the natural operations of nature, the poor neurasthenic American is but as a piece of softened and well oiled putty in the hands of the son of the mystic Orient, and he cheerfully contributes his mite toward the silver stream that flows to the westward in exchange for the skatological luxuries of the Orient, as the other ill-balanced and as easily deluded but wealthy American contributes on a larger scale to the golden stream that flows to the eastward, in exchange for impecunious counts and dukes. Our neurotic American meanwhile endows his celestial spoiler with a scientific skill and a knowledge not accorded to him in his own country, and his ease of acquirement of both reputation and wealth must make him roll on his rug with the greatest glee.

The Chinese medical practitioners are divided into two sets or classes. One class is educated at the Medical Hall at Pekin, where they are taught the Chinese medical classics. The students of this class are selected from the families that have long practiced medicine. These practitioners are intended for attendants on the Imperial household, and for the great officers of state. The other class is composed of the quack element, and is of the itinerant order and is sublimely ignorant as well as knavish. The so-called educated Chinese practitioner studies at the Hall

under a faculty composed of fifteen Imperial physicians, and of forty physicians of a lower grade, besides a small army of assistant professors and apothecaries. The oldest of their medical works is supposed to be the work of Houang-ty, who lived in the year 2637 B. C., and at that date is said to have compiled the treatise on medicine called *Y-ling kay-tcho*, with an epitome of the same that is called *Kuey-King*. The more modern works are based on the labors of Chang-ke, who flourished about 229 A. D. From the works of these two Chinese sages have originated all of the other medical works. The learned Chinese doctor is not ignorant in the sense that he has not studied, as from early youth he has been subjected to a degree of cramming and of learning by rote, such as would discourage and wear out the less patient and less toiling Caucasian. He has been obliged to learn stacks of sacred precepts taken from their most ancient sages, and the admixture of intricate and bewildering astronomy, meteorological signs, and endless physical complication of concurrent signs, appearances, and detached disturbances that he has been compelled to learn by heart is simply appalling. Anatomy and physiology cut no figure in these studies, and they are considered wholly unnecessary, as disease is wholly a matter depending on good or bad vapors, and is either of divine or diabolical origin. In spite of their most elaborated treatises upon the pulse, from which they profess to be able to form the most skillful diagnosis, they are even unacquainted with the existence of the circulation, although some European writers have claimed that the Chinese had discovered that long before Harvey, but we have no evidence of this discovery, either in their books or in their practice. For a certainty, they know nothing of the veins or of their valves, nor of the capillaries; neither have they the least idea concerning the object or functions of the lungs, or their relation to the circulation or the chemistry that belongs to the circulation or to physiology.

Since their more intimate intercourse with the Europeans during the last forty years, and since learning that western medical practice has for its foundation a thorough knowledge of anatomy and of physiology, the Chinese have, in isolated instances, attempted the construction of rude and primitive charts showing somewhat of the anatomical structure of the body, and Wang-Wey is said even to have written a book on anatomy and to have constructed an anatomical model of copper, but these studies, plates, or even the rude and clumsy copper model form no part of the instruction imparted at the Imperial College at Pekin. The Chinese have a great religious aversion to touching a dead body, and this has prevented them from dissecting and thereby discovering the folly of their medical precepts and practice. This aversion to touching a body is so great that they will hardly touch a living one in a surgical sense, and from this rises the complete absence of any surgical or obstetrical knowledge among the practitioners. They practice acupuncture, but their reasons for doing so rest on no medical object, as the following anecdote will show: During Lord Macartney's embassy to China, Ho-choong-tang, the vizier, or Calao of the Emperor was taken very ill, the Chinese court physicians counselled

over the case, and after the expenditure of a great amount of wisdom concluded that a maligant vapor had insinuated itself between some of the great minister's anatomical frame-work, and that by roaming from part to part it had given rise to the acute pains and flitting distresses from which he suffered. From this mixed theological or demoniacal and medical view of the case, these very grave and solemn consultants, concluded that the best way to reach a cure was to make an outlet for this malignant and devil-raising vapor, and to this end they deeply punctured in various places the great vizier's agonized anatomy for the purpose of giving these vapors a free exit. Notwithstanding that the doctors were the most scholarly and wise in the nations, and attached to the person of the Emperor, or that the needles were skillfully wrought in silver and in gold, and introduced *secundum artem*, the poor vizier in all his greatness and power did, nevertheless, writhe about under the torture like an impaled worm; in fact, he was like the poor woman mentioned in the 25th verse of the 5th chapter of St. Mark, who "had suffered many things of many physicians, and had spent all that she had, and was nothing bettered but grew rather worse." The distressed minister was finally prevailed upon by Lord Macartney to allow the Embassy's physician to examine him. Dr. Gillen found him suffering from rheumatism and an inguinal hernia, and was soon able to relieve him from the pain of the one and from the danger of the other. The imperial physicians even knew nothing of a hernia.

The above is but a sample of the rationalism or of the practicability contained in the Chinese system of medicine as practiced by their most able and learned physicians. It would be idle to argue that the Chinese exclude either some sound judgment or good sense from their medical precepts, as the history of their medicine can be traced back through Tibet, and many of their practices bear the imprint of an origin with the practices of the Egyptians in the time of Pythagoras. The strict and undeviating conservatism with which we so blame the Chinese, is only after all, but a remnant of misty antiquity, which their religion and veneration for all that is ancient have carefully preserved. This strict conservatism has peculiarly effected their medical creeds and beliefs, and it is owing to this that the science of medicine has been so stationary. Medicine and theology for long traveled hand in hand, and from the traditions of ancient Egypt, we learn that the priesthood of the Egyptians was an hereditary occupation, as well as that any improvement or attempted deviation from the beaten path was sure to be visited by the most severe penal discouragement, hence the Egyptian priesthood never dared attempt any departure from the rules and practices of their combined priest's and physician's office as laid down in the sacred canons. Moving to the eastward we learn from Strabo, that among the inhabitants of Hindostan the practice of medicine was restricted to a sect called *Samareans*, who were likewise restricted within certain bounds and prevented from making any improvement or changes by such severe codes as continually placed their necks in the greatest danger. The untoward effect

of a drug or an attempted new procedure preceding a death was liable to be followed by the decapitation of the innocent but too venturesome doctor. In China the medical practitioner although enjoying more freedom than formerly is liable to be arrested at any time and severely prosecuted in the event of an accident, or of a death, if accused of practicing contrary to established rules and practice. In the event of a conviction he may be forever debarred from the practice of his profession, if the patient's death is deemed accidental; should it, however, be found or be interpreted that the practitioner tentatively administered drugs or needlessly ran needles into his patient against all precedents and established rules, and this merely for the purpose of gain, then a judicial conviction carries with it the full penalties of a robber's sentence, and in that case the unlucky doctor may be caused to die through some of the many horrible modes of slow death accorded to criminals, or he may at once be mercifully decapitated.

We can here observe the migration eastward of the medical ethics of the early Egyptians, as these ethical codes and observances wandered into the northern part of India and into Tibet and Tartary and thence into China, where the religious veneration for all that is antique has maintained them uncontaminated for so many centuries; and if we compare the early writings or traditions of medicines that from Egypt were carried into Greece and into Italy with the fundamental ideas or ground work of modern Chinese medicine, we will find an identity of thought and of premises that at once betray the origin of the latter. We are told that the Egyptians excelled in medicine to that degree that they gave rise to the study and practice of specialties, not only upon each organ but every then known disease. The Chinese also practice specialties, some devote their attention to such diseases as they term the *hot* affections, whilst other practitioners only treat such as are termed the *cold* diseases, whilst others, in imitation of the old barber surgeons restrict themselves to the practice of acupuncture or cupping.

The Chinese doctor is not esteemed nor held in that honor or respect which we might expect from their laity. Even the best of their physicians are treated very much as we treat our quacks. He is only to make such calls as he is specifically called to make for which he receives from twenty-five cents to a dollar and a half per visit before taking his leave; much oftener he is only paid for the medicine he has ordered or prescribed. In a protracted illness it is not unusual for the family of the sick man to change his physician every day. The better class physician makes his visit in a sedan chair, takes a cup of tea and solemnly smokes a pipe in the anteroom before examing the patient's pulse—solemnity and impressiveness are very necessary adjuncts; he then prescribes or compounds his medicine, receives his dollar or more wrapped up in a piece of red paper which he pockets in an abstracted and indifferent manner and then departs still wrapt up in silence and solemnity; he does not call again unless requested to do so. The diagnosis or prognosis expressed by the attending physician cuts no figure with the laity who judge of his ability wholly

by the *immediate* results of his medicines or a change in the disease. His connection with his patient is therefore of the most transitory and unconnected order and we need not be surprised at his inability to accumulate any great fund of knowledge or experience from the desultory or disjointed practice which precludes any range of observation; neither does such practice offer any incentive for comparative study and observation. Dabry tells us that the Chinese practitioner has degenerated into a piece of hypocrisy, cupidity and of elaborate charlatanism. We are not in the least surprised that it is so.

A writer on the habits and customs of the Chinese informs us that when the patient is old and infirm that the practical, cool and calculating relatives will often well weigh the matter as to whether the patient is worth the expense of doctoring, and they oftener conclude to save these otherwise unremunerative or useless expenses for the purchase of a more elaborate coffin, as a fine and striking funeral is a great religious as well as a great social and domestic event to a Chinaman. Their great respect and reverence for the remains of the dead, and the unstinted generosity for the welfare of the future of the departed also bears a strong savoring of having come from Egypt along with their ideas of ethics of practice, and of their nebulous and mythological views of medicine. The Chinese look upon their medicine, as they do upon many of their social and religious customs, as well as upon their rulers, as having all primarily originated in celestial regions, which is also in keeping with the Egyptian ideas of the origin of all things, and it is from these celestial ideas that they call themselves Celestials, and their kingdom or empire, the Celestial. We here have also an unsurmountable reason why the Chinese will neither alter, innovate or improve his medical tenets. As it came direct from the sky, it can neither err nor require tinkering with at the hand of base man. The submissive, indolent, patient, uninquiring and satisfied mind of the Mongolian, here greatly differs from the opposite conditioned mind of the Greek, or even from that of the Egyptian antiquity. The Chinese has easily been held within the bounds of passive obedience without a resort to active imposition. The most passive means allied to the early home training have been quite sufficient for the continued subjugation of these docile people, whose minds totally lacked the assertive independence and turbulence of the Egyptians, of the Greeks or the Hebrews, especially the latter, who constantly required a resort to active and impressive magic and miracles, as well as to a continued renewal of imagined or visible celestial influences to keep them in their faith and obedience. The short absence of Moses on Mount Sinai, whilst procuring the tables of the commandments, was quite sufficient to allow the Hebrew hordes to rebel against their God and stray after strange gods, and only the recurrence of national calamities could in the future keep them within bounds, whilst the restless Greek soon analyzed his gods and their works, and coming down to strict materialism soon begun to improve in the greatest manner upon all that tradition gave as of Olympian origin. The Chinese have neither rebelled nor inquired; they and their religion, medicine and cus-

toms, all have remained stationary since the days of Osiris in Egypt, and of Jupiter and Apollo in Greece.

As before observed, however, we do not wish to be understood as implying that Chinese medical practice abounds alone in follies and absurdities. That is not the case with the Chinese any more than it was with the medicine of the American Indian, or of the Egyptian, of the Hindoos, or that of the earliest Greeks. Recipes and maxims relating to the maintenance of health and the care of disease, of some value, are still to be found among all barbarous and semicivilized people. These were gathered together to form the earliest medical and moral codes. The men to whom fell this task in China as well as elsewhere, were of necessity, both observing and discriminating, and we can well perceive how much of the rational and useful must thus have come to the surface and been embodied in their medical creeds. The medicine of the early Hebrews and of Talmud, as well as the medicine of Vedic times in India gave ample evidence of the progress that had been made in the science of preventive medicine, and we need not be surprised to find that in these lines Chinese medicine contains an extensive literature. The great standard book known as the "Imperial Work" or the *E-tsung-king-kass* is full of preventive medicine. The work *Chang-Sang*, translated into French by Dentrecolles and devoted to the subject of "long life," is on the same line as those of Hufeland, Flourence, and Hamphry, except that they give neither logical reasons nor statistical results. They simply deal in philosophical medical precepts mingled with moral philosophy and good advice. The great Chinese medical compilation consists in the work called *Ching-Chee-Chum-Ching* which comprises forty volumes, eight of which deal with their peculiar pharmacology. In addition to these, the Chinese have many more extensive treatises compiled under various reigns; these do not differ from each other, however, as they all strictly adhere to their ancient landmarks; the later authors show, however, a habit of close observation that is truly astonishing considering the little practical utility that observations must assume in the otherwise chaotic and unconnected condition of their systems, as they simply record the isolated observations. Their description of a disease is often as minute as can well be desired and the medical man who has been formerly reared in the *Tay-y-yeun* or Imperial Medical College of Pekin, could be trusted with diagnosing any classical, current, or uncomplicated disease, but even with these, the least complication would cloud their judgments and leave them at once at sea, as they totally lack the faculty of generalizing. The present College is, moreover, nothing but a shadow of its former self, either in importance or in efficiency; whereas, it was formerly the custom to appoint the medical professors after a competitive examination or concourse, by which their ability was demonstrated and established, these places are now, in keeping with the general Chinese governmental corruption, sold to the highest bidder,—as were the offices of court physician and first physician to the king sold in France to the highest payer by Mazarin, during the minority of the reign of Louis XIV, and the Regency,—from which it has followed that the

only line of demarcation that now exists between the various grades of Chinese practitioners is not one drawn as to their relative intelligence or honesty, but only a demarcation that depends on their relative state of wealth. When the itinerant and ignorant, bill-posting and handbill-distributing Chinese doctor has amassed sufficient wealth by the sale of charms, drugs and by the pay he has received for the firing of fire crackers with which he has controlled the genius of disease, he can then purchase a professorship in the *Tay-y-yeun* and at once don wisdom and respectability with wealth, as is unfortunately done elsewhere.

Considering their ignorance of anatomy and of physiology, as well as their total unacquaintance with the circulatory system or of their relation or purposes in the economy, it is surprising that the Chinese attribute so much of their skill in diagnosis to the character of the pulse as they have elaborated the science of sphygmology or of the pulse, to an almost inconceivable state of minutiæ. There is the ponderous part of their study for the learned, and a most certain source for an owlish and solemn imposition on the part of the ignorant medical pretender, as with the patient's arm resting on a cushion, he will for an interminable period of time feel of and note the quality of the pulse with an air of sedate gravity and of owlish wisdom as well as with a degree of patience that must be seen to be appreciated.

Man is, according to the Chinese, divided into three regions like the universe, so as to correspond to the sky above, to the earth beneath, and to man in the intermediate space. The first space as regards man reaches to the diaphragm, and this corresponds to the sky; the second space corresponding in man to the great scheme of the universe, contains all that we find immediately below that muscle, and consists of the stomach, liver and spleen; whilst the intestines, along with the bladder and the legs and feet correspond to the earth. The upper of these spaces is allied to the clouds, the middle region to rain, and the lower to the lakes and bogs. There is then a vital heat and a principle of humidity that is thrown into discord by the condition of the elements producing disease. Life begins in the morning, the vital and the humid spirits begin their race about the body, and the Chinese calculate that during 24 hours, they make 50 consecutive tours of the system, or one complete revolution in a little less than thirty minutes; during the same period, man is said to respire, expire and inspire, thirteen thousand five hundred times, and that each respiration pushes these vital spirits along on their course for the length of six inches, making for the day a total run of eighty-one thousand inches. The longest stretch or single journey that can be made in the body by these spirits is estimated at 1.620 inches. The whole body is supposed to be, when in health, like a many stringed instrument with perfect harmony in every part, and the Chinese maintain that this analogous harmony in the body gives rise to the pulse of health, and that a derangement in any part of the body disturbs the harmony and that the pulse must therefore indicate the organ attacked as well as the quality, quantity and order of the disease. Aside from each organ being supposed to possess its natural

and its contrary pulse, or that of health and of disease, the Chinese further classify seven external pulses or those that belong to the innate heat, and eight internal pulses or those that belong to the radical humidity, after which come nine more pulses belonging to the great communicative channels. Each of these pulses, which are further sub-divided into many more, carry with their character certain unfailing diagnostic and prognostic signs. The great communicative channels above alluded to are believed to exist in connection with each special organ, and ramify from the fingers and toes to every organ so as to intimately connect the whole and allow a free passage to the spirits. When the Chinaman is sapiently feeling the American pulse he is thinking of all the above bewildering problems and a large octavo volume more additional of just such matter if he is educated; if he is not educated and only an itinerant he is simply putting in his time mentally computing how many pulses of American gudgeons he will have to linger over before realizing enough dollars with which to return to China and purchase a professorship in the Imperial College.

The rules for the examination of the pulse—the main accomplishment in Chinese practice—are very minutely laid down in their codes or medical works. These are some of the main points:

1st. The physician who visits the sick should be of sound body and of clear mind, and he should make his visits early in the morning and whilst he is still fasting.

2nd. He should examine into the sex of the patient, also whether he or she is fat or lean, aged or young, small or large.

3rd. He should carefully remember the location of the three principle pulses in each arm, as well as their correspondence to the internal organs.

4th. He should be able to discriminate between the natural pulse of each part and the contrary pulse.

5th. He should be able to recognize the principle seven external, the eight internal, and the nine communicative canal pulses, as well as he should be perfectly familiar with the twenty-six fatal pulses.

6th. He must fully understand the alteration caused in the various pulses by the four seasons, as well as the pulse that belongs to the flesh, that which belongs to the blood, to the nerves, and lastly the one that belongs to the bones.

As above remarked, a large quarto volume would hardly hold the description of the various pulses and of the prognostics; Father Du Halde devoted one hundred pages of his work to this subject alone. The importance of the chronological connections with these pulses is also fully insisted upon. The physician should examine the pulse during forty-five consecutive beats, and during nine full respirations, repeating the operation at each of the three pulses of each arm, beginning by almost imperceptibly laying his finger on the skin above the artery, and then gradually increasing the pressure until he obtains a deep pulse. The literature and instructions on this subject are decidedly Oriental in their description as well as poetical in their construction; for instance, the pulse of the stomach

is said to resemble the rustling of the willow leaves when agitated by a gentle zephyr.

The normal pulse has five beats to a respiration, if it is less, it denotes a want of vital heat; if it is as low as three, it denotes danger; two beats indicate a very dangerous condition, and at one beat it means death. On the other hand, six beats to one respiration signify an excess of vital heat; seven beats, great excess; eight beats, danger, and nine beats mean a fatal ending.

Were it not for the visionary views and the utterly irrational ideas that we know abound in Chinese medicine and govern its technique, we might believe they knew something important and practical concerning our pulses that has escaped our less sensitive European or American sense of touch, but when they tell us that they have a pulse that denotes the health or diseased state of the imaginary communicative channel that runs from the little finger or the big toe by zigzag and devious routes to the stomach, and that the prevalence of wood over iron is the cause of strabismus, we may conclude that the bulk of their science of sphygmology is either purely imaginative or deceptive. That they should deceive themselves on their pulse theories and continually practice on those lines is not so strange, when we fully consider their religious or mythological views and their belief in the divine descent of their medical creeds, as well as their great and undeviating veneration for all that is ancient; but how such nonsensical jugglery can impose on otherwise intelligent Americans is past comprehension.

The Chinese further imagine that the windpipe enters the thorax just as a faucet enters a beer barrel, and that the brain occupies only a small central space in the skull. With their peculiar ideas concerning the working of the vital air within the economy, they intersect the body with tables and canals for the passage of this vital air or gaseous spirit; these are supposed to run from the hand to the head and from the legs and feet to the various abdominal and thoracic organs. They know of no connection between the veins and arteries, and the heart is supposed to have but one cavity or to be constructed something like the bulb of a Davidson syringe. The marrow is in the brain and from this organ it proceeds to the reproductive organs. The lungs, they believe, regulate the temper, and they look upon the stomach as being the warehouse of the body, and upon the kidneys as being pillars of strength. Such are a few of the anatomical fantasies and physiological absurdities with which the Chinese gentleman of medical education has to be burdened down. It is no wonder he looks wise, solemn and owlish; it would make most of us very solemn were we to stagger around under so much wisdom.

The absurdities of Chinese medicine are by no means confined to pulse theories, to their visionary anatomy, or to their skatological materia medica and therapeutics. They have a branch of medicine analagous to our medical jurisprudence. The processes of government and the machinery of justice for the detection of crime whereby to punish the guilty, could not well exist without some code relating to this branch. We are

even told that so important is the subject considered that it forms a part of their competitive examinations. They have a special work devoted to medical jurisprudence, called the *Si-yuen* which in English is translated into the unclassical name of "the washings of the pot," which is in the hands of every Chinese magistrate: this medico-legal work was prepared ten centuries ago and it has since only undergone a few revisions. When a body is found in the water, on the ground, or in a grave, and the magistrate wishes to know whether the person died from violence or expired by some disease or through the natural limitation of life, he proceeds to an expedient which will determine these questions, and this, whether the soft parts have begun to decompose or whether only the dry skeleton is left, is believed to give reliable results. The proceeding is as follows:

"The body," says the Abbe Grosier, "being taken up in all suspicious cases, is, after exhumation, carefully washed with vinegar; a large fire is next kindled in a pit, dug expressly for the purpose and measuring six feet in length, three in width and as much in depth; the fire in this pit is progressively augmented until the surrounding earth becomes intensely heated, when the fire is removed, a large quantity of vinous liquor, fermented from rice and honey, is poured in, and the mouth of the pit covered with an osier hurdle, upon which the body is stretched out at full length. A cloth, supported in the form of an arch, is then thrown over both, in order to confine the vapor of the vinous liquor thrown in the heated pit, and direct its action to every part of the body. At the end of two hours the cloth is removed, and the body minutely inspected; when, if any blows have been inflicted, their marks, it is said, will appear distinctly on the body. Even after the total decomposition and disappearance of the softer parts when nothing but the arid, naked skeleton survives, the process just detailed is, if we believe the medical writers of the Chinese, sufficient to render the marks of any blows, if of sufficient severity to occasion death, distinctly visible, though no fracture of the bone has been produced."

When there is any doubt or obscurity about the case and a suspected person apprehended, he is put to the torture and all medico-legal questions are at once cleared up by confession of the tortured. Their jurisprudence further details how to detect the different marks upon the neck of a strangled person, which will determine whether the person did the deed himself or whether it was done by others; or whether it was done while kneeling or lying down, or whether accomplished by a stop knot or by a turning knot; as the Chinese are the greatest persons to shut off their own windpipes by suspension on the least provocation, thus furnishing an immense amount of material for observation, it is just possible that the science of jurisprudence in this particular regard may have reached a degree of perfection unknown to other nations; although we must declare that the idea of steaming a skeleton on an osier hurdle in the belief that evidence of violence will be forthcoming is more fantastic and visionary than based on any scientific reason or experience.

To reach the climax of their absurdities we must study their materia medica. The ridiculous, three or four thousand year-old, baldheaded and

whitebearded absurdities of their anatomy and pathology may be said to be simply speculative and passive. At least it matters little to the sovereign American, that Chinese medicine says that his liver is on the left side or that his windpipe fits into his thorax like a sawed off piece of gas pipe sticking a few inches down into an empty cellar, nor is it very material to him that Chinese medicine would map out his anatomy so intersected with canals that it would be hard to distinguish him from a map of the city of Venice or an astronomer's map of the planet Mars; but when we reach Chinese therapeutics and materia medica we at once strike aggressive grounds, as it is no longer only a question of passive absurdities, but it is now a question of positive and aggressive nastiness and something interesting to the aforementioned American citizen, for however heaven inspired their ideas of anatomy or of disease may be, some of their therapeutics can certainly claim to be devil or infernally inspired, if their source and quality is an index. The air, the earth, and the sea, as well as the lakes, rivers and the bogs, all are called to contribute their quota to this branch of their medicine. The juices, bones, secretions, excretions and dessicated tissues of various animals, even including all of the solid and fluid excrement from the great Lama himself, as well as the placenta from parturient woman, are here brought into requisition, and either in powder, confection, or in the shape of tea, are poured down the happy and confident throttles of their faithful.

As an example of the puerile absurdities with which their therapeutics abound, we may mention that in obstetrics when called to a case of difficult labor, the celestial sage will gravely place in the hand of the parturient female a dessicated sea-horse—a little dried marine animal about six inches long with a head resembling that of a horse and the body like that of a fish, such as are seen in many of our museums–in the firm belief that it will insure safety both to the mother and child. "It is sufficient" observes a learned Chinese medical writer, "to place this marine insect in the hand of a woman in labor, and she will be delivered of her burden with the same facility as the ewe which has gone her full time."

Although they believe in the existence of a medicine for each disease, the Chinese practitioner will, nevertheless, compound a mixture containing twenty or more medical ingredients, not exactly on the principal of the more the merrier, but to make sure that he has struck on the right remedy. Their system of therapeutics is further complicated by an admixture of coincident planetary and astronomical contingencies, and the practitioner must be somewhat of an astrologer and a diviner, as well as a medicator, as various diseases and various drugs have their days of conjunction and of opposition, and of good and bad luck, which materially affect the result. The great Chinese dispensatory or herbal, the *pen-tsao-cang-mon* contains twelve divisions of remedies, which are divided from each other by their properties. The vegetable kingdom and its productions appear in one of these classes, and if anything were wanting to convince us of the prevailing absurdities of their medical ideas we would certainly find it in the fact that the letter five is an essential factor in all

their philosophy as well as in their medicine. They recognize the existence of five planets, to wit; Saturn, Jupiter, Mars, Venus and Mercury; they also enumerate five primary bodies, to wit; earth, wood, fire, metal, and water; and five principal directions, to wit; the east, west, north, south and the middle or central; likewise five organs, the heart, liver, lungs, kidneys and the stomach; then there are the five colors; the yellow, red, green, black and white. As the colors are five in number, they are believed to possess some magical remedial powers, and, on account of some absurd and undiscoverable reason, each medicine is associated with a therapeutic virtue *in accordance with its color.* First of all, they associate one of of these five colors with a given one of the five primary or simple bodies which are in some unintelligible manner also associated with medicine; for instance all medicines that are of a green color are associated with the simple body *wood* and accredited to act upon the liver, this being also possibly suggested by the color of the bile. The red medicines are for the heart, the yellow are for the stomach and the white for the lungs, whilst all black colored medicines go to the kidneys. The therapeutic action of drugs are further believed to be affected by their tastes. All *sour* tasting medicines are associated with the body *wood*, and with the color *green*, and are, therefore, applicable to all liver diseases. Pungent tasting medicines affect the lungs and all sweet medicines are very considerately destined for the stomach. The leaves and branches are supposed to furnish the appropriate medicine for the extremities, whilst the tops naturally give medicine for the head. The roots affect the feet, and the pith should furnish medicine for the internal parts of man, while the bark from the trunk should contribute to the medical needs of the skin and of the muscles.

As an offset to all these absurdities, there exists an undoubted fund of empirical knowledge concerning the effects of many drugs upon the system and upon certain diseases that is founded upon experience and observation. All this knowledge exists, however, in a disconnected and in a purely individual manner. Individually, the Chinese are good observers, and not lacking in perception, and many of their practitioners pick up bits of individual experience which they perfect in an isolated manner and put into constant practice. With all their tenacity to old customs, there is, nevertheless, an inconsistent desire for some improvement, provided this improvement does not assume any organized shape or interfere materially with their general conservatism, and it is to this end, that the students admitted to the higher classes in the Imperial Medical College in Pekin are taken from those families that have long followed the practice of medicine, as they hope, by these means, to preserve and obtain the benefit of such empirical experience as can be handed down from father to son. In this manner, we cannot deny that some of the Chinese may reach a skill in some narrow specialty equal to that of the celebrated Sweet family of bone-setters in New England, but this skill and knowledge is in a very narrow limit and is fully circumscribed in its action. When outside of his particular rut, the Chinaman must depend upon imposition and his course of action is, of necessity, dictated by speculative and erratic

ignorance. That he is conscious of his ignorance and of his helplessness is undeniable, and from these causes the Chinese practitioners — even the very best of them — soon degenerate into sordid, calculating and hypocritical humbugs. Dabry, who has prepared an Europeanized epitome of Chinese medical practice as well as of their veterinary medical art, after an unprejudiced survey of the field, concludes that the drift of Chinese practice is to run its practitioner into firm and settled habits of cupidity and charlatanism.

There exists a feature in this connection which is of interest to Americans. In China, the broader minded practitioner would often avail himself of the knowledge that his European or American fellow medical man places at his disposal. Some will even take a great interest in studying our medical and surgical books and charts, and will inquire into their meaning. Many practitioners would even put all their newly acquired knowledge into practice but for the discredit and prejudice into which such innovation would bring them with the ignorant of the laity and the opposition it would arouse with the rest of the more conservative practitioners. In the United States, the Chinese practitioner has no such excuses, but, on the contrary, he carefully avoids any contamination with us barbarians. With full access to our libraries, museums, colleges, and our dissecting rooms, he carefully avoids any opportunities for improvement, conscious that his standing and social success with the credulous American, depends wholly upon his maintaining a strictly mystic Oriental character, and upon the ignorance of the real status of Chinese medical science among his American admirers. It is not to our credit that we should foster an ignorant and ancient empiric medicine that finds no favor with the enlightened Asiatics themselves, as little Japan has established its medical colleges, and its army and navy medical staffs are fully on the basis of those of Europe and of America. Had Chinese medicine possessed anything worth retaining, the Japanese, whose medicine first came from China, would certainly have retained it.

* MALARIA.

BY J. M. BURLEY, M.D., SAN BERNARDINO, CAL.

Where is it propagated?

How does it enter the animal economy?

What is its prophylaxis, if any?

What has been, and is, its treatment?

I believe it has been, for a decade or longer, the fashion to select isolated and sometimes obscure cases, for discussion at meetings of our profession throughout the country; cases that the general practitioners seldom or never see. While those cases are often interesting, the writer has always doubted the utility of this course of procedure; they are presented often to the exclusion of matters that come in the general course of every day business. For this reason I have selected for my subject one that has been in the literature and before the profession from its earliest

*Read at the Fifteenth Semi-Annual meeting of the Southern California Medical Society held at Los Angeles and Catalina, June 5th and 6th, 1895.

period to the present time, and I believe I can safely say there are fewer real facts established in regard to its origin than for any other disease to which humanity is heir. The literature upon the origin of malaria from the days of Galen and Hippocrates down to the present has been a tangle of statements from which the medical student has found it hard to derive satisfactory conclusions. About the only one thing that those writers agreed upon was, and I may say is today, the theory that malaria was the product of the marsh or swamp.

About the first prominent writer we have any account of upon the subject was Lancisi, an eminent Italian physician, who lived and wrote about the year 1695. He took this view of it, and attributed the unhealthful condition of Rome at that time to the Pontine marshes that then existed in the vicinity. This theory received the sanction of both European and American writers, down to Dr. Loomis, with probably one exception, that of Dr. Watson, who wrote his famous lectures between 1840 and 1850, and which are good authority today upon this topic. In discussing the periodic fevers, and kindred diseases, Dr. Watson took the ground that malarial diseases did not emanate from, and were not the result of, decaying vegetable and animal matter, nor due to swamp gases, but were the result of a specific poison, which produced specific results upon the human economy, and cited many instances to show that this was true, some of which the writer will take occasion to refer to later on; also that the lower animals, as well as the entire human race, are alike subject to the pestiverous effects of this poison.

Bishop Heber recites the fact in his narrative of a journey through the upper provinces of India that at certain seasons of the year, the monkeys and tigers, as well as most wild animals, flee to the mountains, and the wild hogs and antelope make incursions into the plains below to avoid the unhealthful conditions that exist in those woods during this period. He says not a single sign of animal life was to be seen there during this period, the dry season of the year, and not until the rain descended in torrents was it considered safe for either man or wild beast to inhabit this section.

Dr. Watson relates that at one time the English army was in Holland during a very dry and hot summer, and took up an encampment at Rosendall and Ousterhaut; these situations being selected in consequence of being a sandy plain almost devoid of vegetation, nothing but stunted heath brush growing; that the water used seemed pure and potable. Here malarial fever appeared among the troops in a very short time. Again he relates that the English army at one time in Southern Spain made an encampment in some hilly, sterile ravines, there being in those ravines pools of what they supposed was pure and healthy water. They had hardly made their bivouac when the troops fell prey to malarial fever. He also relates that after the battle of Talavera the army retreated along the course of the Gaudiana, in the plains of Estramudera which then, on account of the long continued drouth, had ceased to be a running stream. The troops

so suffered from malarial diseases that the enemy rejoiced that the English hosts were to be exterminated by disease.

But coming to our own country, I am informed that Key West and also Fort Jefferson on dry Tortugas Island, suffer from malaria. The writer is acquainted with the fact that malaria exists at Ship Island, situated between the Gulf of Mexico and Mississippi Sound, at no point nearer the mainland than eighteen miles, the soil of which is white sand that shifts with every wind and piles up in mounds, where no vegetable life exists except a few starved pines and brush at the east end of the island; neither are there any marshes, this island being surrounded only by the briny deep. The writer had the experience there of a medical officer for eighteen months, during which time malarial diseases were prevalent, he himself suffering from a severe attack of fever. But it may be argued that these, like the plains in Holland, have water near the surface. Well, if so, let us carry our observation to the desert plains of Arizona and California, and see the conditions where, to get water, it is necessary to dig, in many places, more than a hundred feet. It is stated that Fort Breckenridge, situated in the foothills of the Santa Ritta Mountains of Arizona, the soil of which is sterile and barren, was abandoned on account of the unhealthy condition, the result of malaria. Again, the valley of the Pueblo-viejo, situated on the Upper Gila River, was settled some years ago by a colony of people from Utah. The soil of the plains of this valley consists of the washings of debris from the mountains, for thousands of years, and was dry and sterile ; here, to get water, it was necessary to dig deep, or to haul from the only surface water, the Gila River, which here is a bold mountain stream that goes rolling and tumbling in its course over its rocky bed. No marshes in all this country. These settlers were confronted with malarial diseases. The writer was informed by some of these people that many of them found existence almost impossible here on account of the virulency of malaria. But coming still nearer to our own land and climate, the writer had occasion some years ago, to visit Kern and Tulare Counties, California, for the purpose of investigating the system of irrigation there in vogue. In doing so, in company with the superintendent of some of these canals, he went to the source of the water supply, up in the foothills, where the soil was a desert. There the writer was asked by Mr. Colton, the superintendent, to see some men who were sick of fever. He was surprised to see a species of malignant malarial fever that he had not witnessed at any other place in the United States, except in the south-eastern portion of Texas and Louisiana, known in the latter as "Dengue," and abbreviated by the natives as "Denga." In the same vicinity in Kern County his attention was called to the fact that the Chinamen lived and labored, and were kept from malaria, something that he shall take occasion to refer to later on.

Again, we have incidents where the worst of marshes do exist, and malaria does not. This is the case in the peat bogs of Ireland, as well as in some in Scotland. It is also related that, in the Dismal Swamp in Virginia and North Carolina, which covers hundreds of thousands of acres,

and is covered with a rank growth of vegetation and timber, the water is at the surface, and can be obtained by digging a foot or so. This water is of a brown color, which is said to result from decayed vegetation; yet it is potable, and considered healthy. Malaria does not exist to any great extent. If other instances were necessary, they could be multiplied almost indefinitely; but it seems to me that facts like these prove that malaria is not the product of vegetable or animal decomposition, and does not depend upon the bog or marsh for its propagation.

It has been asserted from time almost out of mind, that malaria does not exist at an altitude above a thousand or fifteen hundred feet. This theory, like the foregoing, disappears under close investigation. The writer is acquainted with the fact that, in years gone by, the people east of the mountains frequently took their outings in the parks of the Rocky Mountains. These parks are from six to seven thousand feet above the level of the sea, and entirely destitute of marshes or swamps; the streams of water being clear, rushing brooks, and often filled with trout, and other game fish, the angling for which was the one great amusement of those who hie themselves to those places for recreation. It was no uncommon thing for some of those people to return, after a few weeks' stay, with what they termed mountain fever, which is only one form of remittent fever, and amenable to the treatment of the same. It is also a well-known fact that of the many people of this state who take their outings in the Sierras, some will return with mountain fever. The locations, where they contract it, are often above five thousand feet. Incidents like these without number could be adduced to show that malaria is no respecter of altitudes.

Again, it has been asserted from the days of Lancisi, down to the present, that a certain degree of heat was necessary to produce malaria. Some of these writers, Dr. Loomis being one, giving a temperature of 60° F. as necessary to produce malaria, and stating that a fall of temperature to the freezing point was destructive of this poison. Now, if incidents were necessary to controvert this, they could be multiplied like the others heretofore; but the writer will content himself with quoting from that admirable article in the Journal of the American Medical Association of May 18th, '95, from the pen of Dr. William E. Quine, of Chicago, who cites forty clinical examples which existed between November and March. Thirty of these cases, he says, originated certainly in Chicago on the south side, in a densely populated portion of the city. He says: "We have been beguiled with the belief that such diseases do not exist in large cities, and especially in the dead of winter. No knowing how many cases were overlooked. Only suspicious cases were subjected to the test, and in these the blood was found teeming with protozoa of malaria. This too with the thermometer often ten degrees below zero F., the ground being frozen a foot deep, as well as covered with macadam, ice and snow." Further illustration is hardly necessary after this clinical record furnished by this industrious investigator to establish the fact that heat is not necessary to the propagation of malaria. (Dr. Quine seems to still adhere to the theory

of the production of malaria by the marsh, notwithstanding his use of the searchlight of investigation.)

Admitting the fact that malaria is a specific poison, the question at once arises how it enters the animal economy. The theory advanced by many of the older writers established the fact satisfactorily to themselves that it was through the air passages, and this is still accepted by many of the present day. The writer has long been skeptical upon this point, as well as other accepted theories upon malaria, and has believed for more than a quarter of a century that the poison, whatever it be, enters the system through the alimentary canal, and largely through the water we drink, though fruits and vegetables eaten raw may carry it. Here are a few incidents that confirm this belief. His mind was first called to this matter in Louisiana, at Fort Pike, where the garrison was supplied with water from cisterns filled by rain. He was informed that during a long dry spell these cisterns gave out, and the garrison had to resort to distilled water for domestic use, during which period malarial diseases were much lessened, and of much less virulency. Again, the cases of the Chinamen in Kern County, who were exempt from malaria, while the white laborers suffered much, are accounted for upon the ground that the Chinamen drank no water, and used only tea, while the white man used the river water. Again, the writer had a camp of Chinamen employed in improving some warm springs in San Bernardino County. The white man who had charge of the work, complained much, during this time, of malaria, while the Chinamen were exempt. This white man also noticed the fact that the Chinamen used only tea for drink, while he drank the water of the springs. The writer does not hold the view that tea is a prophylactic for malaria, but that in making the tea, the water is boiled, and thus the germs of malaria are destroyed. Many incidents coming under the writer's observation lead him to believe that malarial diseases are largely due to the water we use, or in other words that malaria is a water-borne complaint.

Then admitting the premises from the facts set forth that malaria enters the system through the alimentary canal, do we have a prophylaxis for the same? To which the writer will say, yes, and can cite many incidents to substantiate this fact. In addition to what he has said before, he can furnish a living example of the efficacy of first boiling water before using it, in the case of himself and family. When he made up his mind to become a resident of this state, he examined many locations and selected his present place of abode (San Bernardino) on account of its bountiful supply of what he supposed was pure and wholesome water. The gushing artesian well at almost every residence was a big inducement in making up this decision. He and his family had hardly been ensconced comfortably in their new home, when he was confronted with the fact that he had malaria to contend with. This he did by fighting it at every turn, with all the remedies known to the profession. He was not willing to accept the idea of the sparkling wells belching forth malarial germs; but after all other ideas failed, he was driven to the conclusion that the water supply of those wells was from the accumulation of rain and snow high up in the Sierras;

that the malarial germs were carried into the earth to the great subterranean reservoir from which the wells drew their supply. He at once began the sterilizing of the supply of water for domestic use, with the most gratifying results, and in a short time malaria disappeared from his doors, and he and his family had no further use for anti-periodic remedies, and only now when he becomes careless of the supply of water for drinking purposes is he reminded of his duty in this line.

What are the remedies that have been used, and are now used, for the relief of malarial diseases? Upon this subject the writer will not dwell further than to refer to a few remedies that have been used in the early treatment of this complaint, to demonstrate his theory that malarial poisons are largely expended upon the nervous system.

It is related that there was a time in Europe when the sufferer from intermittent fever was required to swallow a live spider. Later on a spider web was considered to possess remarkable curative properties in this complaint, and, in fact, the writer recollects when the spider web was used in this way. At other times a sudden shock to the nervous system was considered efficacious in this complaint, or even the swallowing of a nauseating dose. In his early work the writer had a lady patient who had been a sufferer from tertian ague. He could only suppress it, to see it return again. This lady on her well day would attend to some duties, as well as make occasional calls on her near neighbors. One day in her efforts in this direction she attempted to cross a stream of water, by means of stepping stones between which the water was deep and swift. In making the passage she lost her foothold, and went into the cold, icy stream, and might have drowned but for help being near by. She at once considered her life in peril, and sent for the writer. When he arrived he found her suffering more from *fear* of the results of the wetting than the wetting itself. He quieted her fears by telling her that he expected beneficial results from it, which proved to be true, as she was better from that day on. Again, the writer had a patient in North Missouri, a man who had been a soldier during the late war, and claimed that he had contracted his ague in Arkansas during his service to his country. He stated "that he had been doped for many months by the army doctors, but only to see his old ague return occasionally." The writer being a new man in the vicinity, the case naturally fell to him. He entered upon the treatment of it with much assurance that he could effect a cure, seeing his patient occasionally as he passed that way, but only to hear the complaint that his "old ague had returned after short intervals." On one of these trips the writer espied his patient in the field plowing, and when he came up he congratulated him upon his rapid recovery, when he was informed that it was not due to his remedies. The patient, when questioned as to what he attributed his improvement, said "he had been advised by relatives on the Missouri River that coal oil was considered a sure remedy for ague, and one day when he felt his old ague returning, in his desperation he poured out a half a tin cup of coal oil and drank it; that it drove off the chill, and he had no more of it and he was growing in health every day." The

writer does not cite these cases as worthy examples to be copied, but to show the effect of a sudden shock or a nauseating dose upon the patient afflicted with this disease. While it is admitted by the profession that some form of cinchona may be considered the sheet anchor in the treatment of all diseases arising from malaria, the writer is of the opinion that its use is more frequently an abuse than a benefit unless handled with care and judgment.

In conclusion permit me to say that I fully agree with Dr. Quine in his statement that "it was high time that the literature upon malaria should be revised and rewritten in keeping with the investigations of the present age."

REPAIRING OF RECENT LACERATIONS OF THE PUERPERAL TISSUES.*

BY FRANCIS L. HAYNES, M.D., LOS ANGELES, CAL.

After the child is born, the woman is placed across the bed and a careful digital examination of the cervix is made. The educated finger can diagnosticate decided lacerations. The surest way is to hook a Sims speculum under the pubic arch and with two fingers spread apart, retract the perineal body and carefully inspect both the cervix and the posterior vaginal wall. An examination of the anterior vaginal wall will frequently show a number of lacerations, generally superficial.

The cervix is thus repaired. The patient is placed upon a table, the legs are flexed upon the abdomen and kept there by leg rests or a sheet passing over one shoulder and under the other. The end of each lip at the opening of the laceration is seized with a pair of bullet forceps, the lateral vaginal wall being held aside by a Sims speculum. The lips of the wound are trimmed if necessary. A uterine irrigator is introduced into the uterus and a gentle stream of water allowed to flow over the wound and kept flowing during the following manipulation. A short round needle threaded with catgut is now passed above the upper end of the laceration, in sound tissue and tied leaving a long end. The wound is now closed by an ordinary continuous suture, a careful approximation of the edges being made. After the first suture or two has been taken, the bullet forceps are removed and the wound is held in view by the thread which is in use. This is an important point, for if it is neglected the wound will be approximated in an unnaturally elongated position, as is the case in many secondary operations. If you have a multiple laceration, sew each tear in succession.

The perineum. Sims speculum is hooked under the pubic arch. The mucous edges of the lacerations are carefully and thoroughly trimmed, if irregular. If a small bridge of sound mucous tissue separates two lacerations remove it and make one laceration. The upper extremity of the laceration is carefully sought and each tear is closed by an interrupted catgut suture. Close the vaginal laceration down to within one-half inch

* Read at the Fifteenth Semi-Annual meeting of the Southern California Medical Society, held at Los Angeles and Catalina, June 5 and 6, 1895.

of the skin by one or more rows of buried interrupted sutures, carefully approximating the ends of the muscles by separate sutures. If the skin is torn, repair it in like manner by vertical sutures commencing near the anus and carefully bury your sutures. In a complete laceration, the rectal wall is closed by interrupted catgut sutures tied in the rectum. The sutures should not include the epithelial layer of the mucous membrane. The remaining wound is closed as any other laceration, except, that two silkworm gut sutures are passed deeply through the torn ends of the sphincter and tied over the skin as in a secondary operation. The vagina is flushed and then carefully dried, and a teaspoonful of iodoform is introduced and a vulvar pad applied. Patient's bowels should be moved each day giving enough laxative, preferably compound licorice powder, to produce semi-liquid passages. While great attention is paid to external cleanliness, no vaginal or rectal douches are used except for indications.

929 S. Main St.

SELECTED.

DEPARTMENT OF SURGERY.

UNDER THE CHARGE OF JOS. KURTZ, M.D., PROFESSOR OF CLINICAL SURGERY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA, AND CARL KURTZ, M.D.

SEROUS CYSTS AND CYSTIC FORMATIONS., (The Times and Register.) Not infrequently serous cysts or neoplasmata of this character are mistaken for serous accumulations within cavities, notably in the abdominal cavity and in the scrotum. A man has an enlargement, which gives many of the characters of a genuine hydrocele. It transmits light, is irreducible and gives issue to a watery substance when the hypodermic needle is used for exploring purposes. In advanced chronic cases of hydatids of the liver, hydro-nephroses and various pelvic cysts of the female, by an indifferent, cursory examination, we may mistake any one of them for ascites; for hepatic, renal disease or chronic peritonitis.

But it is of considerable importance that these liquid tumors are definitely recognized, as in most instances they may be promptly and radically cured, thereby sparing the patient great mental apprehension and protracted bodily suffering. We have one case in mind, in which a voluminous retro-peritoneal cyst was heroically treated by a practitioner of prominence with hydragogue cathartics and diuretics. Later the case came under surgical care and was correctly recognized; the peritoneal cavity was opened, the cyst walls widely divided and their endothelial lining well sponged with a strong solution of chromic acid. Recovery was prompt and the cure permanent.

Cystic disease of the spermatic cord occurs at two extremes of life—in infancy when the tumor commonly rises close to the external ring and may be mistaken for hernia, as a rule undergoing spontaneous cure with the growth of the child; and, later, in advanced age, taking origin close to the epididymis, attaining great volume, mounting up the inguinal canal, as far as the internal ring in some cases. The repeated tapping of these is of no value other than affording temporary relief. Their proper treatment consists in their enucleation, a comparatively simple and always permanent measure of relief. With serous formations proper we will always have either an organic or constitutional condition to treat.

THE DARKER SIDE OF SURGICAL TECHNIQUE.—By George Franklin Shiels, M. D., San Francisco, Cal. (Occidental Medical Times.) We all recognize the wonderful advances in surgery, gynecology and obstetrics during the past twenty years, and are willing to give the larger share of credit to those who have established asepsis and antisepsis on a firm basis; in fact, surgery has been revolutionized.

All things done should have a reason for their doing, and some of the reasons for writing this paper are the following:

1. While acting as a skilled witness, in a malpractice suit against one of our leading surgeons, the counsel of the opposite side asked me the following question, which deserves our consideration: "Doctor, does this new antiseptic and aseptic epoch justify you in cutting and slashing the human body anywhere and everywhere?"

2. While reading the American Text-Book of Gynecology, I was struck by the lack of true anatomical and pathological teaching, and the small space given to the subject of diagnosis. The whole book seemed to be written on the basis that if you operate according to the chapter on *technique*, all will be well.

3. In a recent account of hysterectomys performed by a female surgeon of our city, I was struck by the writer's naive way of telling how she "nicked the bladder," or "perforated the intestine," and how she 'stitched" and all was well because of perfect aseptic precautions. Let us not multiply reasons. Personal observation tells us that people who are in no way fitted to be surgeons are carving their way, working on the knowledge gained by reading books full of plates, and aided by the belief that, if they use aseptible instruments, and render themselves aseptic "by going through the solutions," they may cut with impunity.

The condition of the patient, the diagnosis, the prognosis, most important of all to the patient, are to these operators of little moment. So long as the wound heals kindly, the mutilation is hidden by a mass of cicatricial tissue.

In obstetrics, the aseptic and antiseptic *technique*, has been carried to a positively cruel extent. Parturient women are shaved, douched, scrubbed and mauled, to prepare them for a perfectly physiological process in the face of the fact that the danger is in the obstetrician and not the patient. This is proven by Dr. Mermann of the Mannheim Lying-in-Hospital, who avoids all internal disinfection and only lays weight on the perfect asepsis of the attendant's hands and instruments, with the result that in 1300 cases he had but one death from sepsis.

In conclusion, I will apologize for dwelling on these evident facts and will urge as my excuse an honest conviction that it is only by drawing attention to the darker side of these methods, which have rendered the progress in surgery perhaps the crowning glory of the nineteenth century, that we can hope to hand it down to our successors free from anything which might detract from its luster.

Through an inadvertence, Dr. Klaus Hansen, the writer of the article in the March *Practitioner* on "The Physician's Relation to the Patient with Regard to Diagnosis and Prognosis," was made a resident of Paris, whereas he only occasionally spends a few weeks there. He is a permanent resident of Bergen, Norway, where he is physician-in-chief of the Bergen Hospital.

OBSTETRICS AND GYNECOLOGY.

UNDER THE CHARGE OF WALTER LINDLEY, M.D., PROFESSOR OF GYNECOLOGY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA.

BICYCLING FOR WOMEN.—In bicycling there seems to have been found at last, says Dr. R. L. Dickinson, in the American Journal of Obstetrics, a form of outdoor muscle work which attracts women and entices them to many hours in the open air. It possesses all the advantages of walking or climbing, and it exercises a large number of muscles; therefore it seems to the author that there is no single exercise that will so efficiently develop muscular tone in the pelvic floor as this. Dr. Dickinson cites somes cases illustrative of this, and gives a cut with two tracings from the same patient showing the difference of her profiles with and without a loose corset. Nearly all the objections to the use of the corset raised by medical men involve the supposition that whatever straining the pelvic contents are subjected to must necessarily be under a snug corset and with the woman bending forward. It has been seen that these are distinctly hurtful conditions, although says the writer, some women no doubt have suffered no harm from it. To direct, however, that the corset should be taken off, leaving a narrow girdle of pressure, does as much physical harm as it does good and to replace the corset by a health waist is to make an improvement of relatively small value, although the rigid front steels, the most harmful factor in the corset, will be banished. The author is convinced, from his own studies, that the health waist should not be countenanced except as a temporary expedient where the breasts are large are flabby.

Under proper conditions of costume and posture, with care that the exercise is increased gradually and properly graded for individual cases, and where there is no acute inflammation to contraindicate it, bicycling will probably show itself capable of large results as an agent in curing pelvic disorders, since it is one of the few exercises which attract women. It seems hardly too much to say, says Dr. Dickinson, that the promise from the bicycle is far reaching. Through it and the habit it will engender we may look for better and freer dress and shorter dress in bad weather, for better exercise, for out-of-door activity, for steadier nerves, for stronger muscles, for painless periods, and for easy labors.

OBSTRUCTED BOWEL.*—Dr. W. Thornley Stoker in the *Dublin Journal of Medical Science*, speaks highly of belladonna carried until it shows its constitutional effects, dilated pupils or dryness of throat. "The weak and impeded heart which is present in so many examples of acute obstruction, is materially aided by the use of belladonna, which is a most excellent cardiac stimulant." Dr. Stoker often combines belladonna with calomel. He says: "The greatest therapeutical desideratum of our day is a method of catharsis by hypodermic medication."

He speaks strongly against long enema tubes, saying: "The absurdity of supposing that a pipe can be passed through the sigmoid flexure must be evident to those acquainted with the anatomy of the bowel. I contend that no mechanical effect can be gained by the introduction of fluid into the bowel which is not possible with an instrument nine or ten inches long, assisted by the natural penetrating quality of water, by gravitation produced by the posture of the patient, and such gentle pressure as that afforded by the use of the tube to which I shall refer. * * * *

* While "Obstructed Bowel" is not distinctively for the gynecologist, yet this extract, on account of its intelligent presentation of the subject of enemas, is presented in this department.— W. L.

All that can be done, can be done best by warm water alone. For some years past I have used but two instruments for giving enemas. One is an ordinary Higginson's syringe, to the nozzle of which a No. 12 or 14 red rubber catheter has been attached. For the daily purposes of rectal toilet, or in cases where the injection is to be retained, or ejected by natural effort, this will be found perfect. It is absolutely safe, and quite painless. It can be used in the most tender infant or the most callous adult; and in instances where injection is called for in the presence of inflamed piles, it is a blessing without any disguise.

The second instrument is an ordinary red rubber tube four-eighths to five-eighths of an inch in diameter, such as is used for washing out the stomach. It is convenient to have circles marked at 3, 6 and 9 inches from its extremity, so as to know what length of it lies in the rectum. A large funnel should fit the dilated extremity and should be transparent, so as to allow the fluid, which is being introduced, to be seen.

The patient lies on his back or left side with the pelvis raised, so as to facilitate the passage of fluid into the sigmoid and descending colon. The only fluid that should be used is warm water, and eight or ten gallons of it may be employed at one sitting. The surgeon sits on the right of the patient's bed, introduces the end of the tube, and retains it in position with his left hand, while with his right he holds the other end of the tube, into which the funnel is inserted. The tube is introduced 3, 6 or 9 inches, as may be indicated, and should be occasionally moved up and down in the anus by the left hand. An assistant pours water in the funnel, and the pressure may be varied by the height to which it is raised by the operator. The left hand can be used at any moment, when the pressure in the rectum becomes painful, to pinch the tube, and stop the flow. When as much water has been introduced as can be borne, the funnel is removed, that end of the tube lowered to a basin placed upon the floor, and the fluid allowed to run out of the bowel. By repeated operations of this kind large quantities of water may be used, and the bowel emptied without the patient being exhausted by straining or by the necessity of changing his position. The solution of feces and expulsion of flatus are assisted by the pushing in and out of the tube which I have indicated, and by the varying hydrostatic pressure, caused by alternately raising and lowering the funnel at the free end of the tube.

The advantages of this method over older ones are as follows:

1. The tube is soft and cannot cause injury.

2. The fluid pressure can be regulated to a nicety, and cannot be made excessive; as if undue pressure threatens, regurgitation into the funnel takes place.

3. Enormous quantities of water can be used.

4. The currents created by altering hydrostatic pressure have a powerful solvent effect on the feces.

5. The operation necessitates no exertion on the part of the patient, no change of position, and can be carried on for a long time without causing exhaustion.

Dr. D. L. Shrode has given up his practice at Azusa and gone to Chihauhua, Mexico, where he expects to locate, if satisfied with the country.

Dr. J. T. Smith, of Cleveland, Ohio, has purchased property in North Pomona and will engage in the practice of his profession there.

EYE, EAR, NOSE AND THROAT.

UNDER THE DIRECTION OF W. D. BABCOCK, A.M., M.D., PROFESSOR OF DISEASES OF THE NOSE AND THROAT, COLLEGE OF MEDICINE OF THE UNIVERSITY OF SOUTHERN CALIFORNIA.

THE CONSERVATIVE TREATMENT OF MUSCULAR INSUFFICIENCIES.—Heath (*Annals of Ophthal. and Otol.*, iii, 2) gives the following reasons for a moderately conservative treatment of these cases: 1. The eye muscles are variable in their strength from day to day. 2. Our diagnosis may be wrong. A coincidence may be mistaken for cause and effect, symptoms due to some other cause being attributed to the insufficiency discovered. 3. The difficulty in deciding which is the cause and which the effect in some cases of nervous prostration with insufficiency of one or more eye muscles. 4. Some patients are neurotic by birth and can never be cured. Palliation is all they can ever expect, and radical treatment becomes hardly justifiable. 5. We should first thoroughly understand the effect of refractive errors and their correction. As errors of refraction frequently cause muscular insufficiencies, correction of the former will often relieve symptoms due to the latter. 6. Regulating the effect of an operation is difficult if not impossible. It may be too much, too little, or none at all. Results reported by operators are often due to other things than the operation. 8. Some cases show weakness of all the muscles. 9. Simple measures relieve many cases.

THE TREATMENT OF HETEROPHORIA.—Duane (*Annals of Ophthal. and Otol.*, iii, 3) believes that there is no single cure-all for any muscular anomaly. Some cases yield to training of the muscles, some to correction of the refractive error, some to tenotomy, and some are incorrigible. We must first ascertain the nature and cause of the underlying pathological condition, and then apply the method of treatment that is adapted to the state found. We must first find out what the exophoria or hyperphoria means; whether it is spasm or paresis, accommodative strain or anatomical conditions, and then apply the proper remedy.

RECENT EXPERIENCES IN THE TREATMENT OF DETACHED RETINA. Bull (*Trans. Amer. Ophthal. Soc.*, 1894) draws the following conclusion from his experience:

1. The science and practice of ophthalmology have as yet discovered no better means for dealing with detachment of the retina than the old methods which have been advised and carried out for so many years—viz., rest on the back in bed, atropine, a bandage, and the internal administration of some drug which may induce absorption of the subretinal fluid. 2. The continual use of pilocarpine, either hypodermically or by the mouth, may cause great prostration, even in cases in which it is apparently well borne; and the desired effect may be sometimes produced by small doses of sodium bicarbonate or potassium iodide largely diluted with water. 3. In all recent cases puncture of the sclera subconjunctivally may do good temporarily by letting out the subretinal fluid and allowing the retina to collapse, thus producing some improvement in the vision; but the apparent improvement is generally transient, and when membranous bands exist in the vitreous no improvement can be expected from simple puncture. 4. Division of fixed membranous opacities in the vitreous causes but little reaction, and may do positive good, even without division of the detached retina, as it reduces the danger of extension of the detachment. It is possibly contraindicated in cases where the vitreous opacity is vascularized

as it would certainly induce free hæmorrhage into the vitreous. It should never be done when there is an irritated or inflamed condition. 5. Division of the detached retina may always be done in a quiet eye and causes little or no reaction. If membranous bands are present in the vitreous, these should also be divided at the same time. 6. In most cases all those operative procedures produce but temporary improvement, and in many cases no affect whatever is gained by them. 7. There seems no good reason for further indorsement of the method advocated by Schöler, but every reason for rejecting it from the domain of ophthalmic surgery.

DEPOSITS OF RUST IN THE CORNEA.— Gruber (*Arch. für Ophthal.*, xl, 2) draws the following conclusions from his observations: 1. Particles of iron which have penetrated the cornea vary in their action according to their chemical properties. Metallic iron and ferric oxydule must be regarded as irritating, while ferric oxide is indifferent. The ring of rust remaining after the extraction of a particle of iron, consisting merely of a hydrated ferric oxide, is indifferent and unirritating. 2. Even in cases of non-perforating injury from particles of iron, there often results a deposit of ferric oxide on the membrane of Descemet. 3. The deposit of rust outside the foreign particle follows very rapidly after the injury. 4. The corneal epithelium resists very strongly the entrance of the ferric oxide deposit.

CORRESPONDENCE.

BALTIMORE, May 31, 1895.

DEAR PRACTITIONER:

It has been my good fortune to have attended the meetings of the American Gynecological Society which held its 20th annual meeting in Baltimore, May 28, 29, and 30, 1895, and I shall endeavor to give you a brief account of the meetings. I inclose a program which will give some idea of the breadth and scope of the subjects treated.

The proceedings were marked by the greatest decorum and while the discussions were earnest and clean cut, they never became heated nor unparliamentary, though there was plenty of feeling and great differences of opinion, which were freely exchanged.

It was a great treat to see these men who teach and write continually for the medical journals, and who collectively compose one of the most exclusive, high standard and brainy bodies of men in this country.

The attendance was good, being fifty per cent. or more of its membership which is ninety, though the limit is one hundred. Several men were elected this year; the conditions for admission being first a gynecologist (specialist,) then unimpeachable character, and the presentation of a paper of merit, not a mere thesis. Unless an applicant measures up to this standard in all respects he is turned down.

Among the noted members present, the most celebrated was one of the founders of the society, T. Addis Emmet, one of the fathers of American Gynecology, who was treated with the greatest consideration, as always.

The president, Matthew D. Mann of Buffalo, N. Y. conducted the meetings with wonderful tact and dispatch, and finished the program before the time allowed. He was given power to limit discussion which he did with rare judgment.

The members best known and taking part in the dicussions were: W. M. Polk, W. T. Lusk, Paul F. Mundé, W. Gill Wylie, A. Palmer Dudley, Bache McE. Emmet, Henry C. Coe, Geo. M. Edebohls, Clement Cleveland, Alex J. Skene, Ely Van de Warker, Goff of New York City and State, Thad A. Reamy, Cincinnati, Ohio, Geo. J. Engelmann, St. Louis, J. H. Etheridge, Fernand Henrotin of Chicago, A. Lapthorn Smith, Montreal, Canada, S. C. Gordon of Portland, Maine, B. F. Baer, J. M. Baldy, E. E. Montgomery, and E. P. Davis of Philadelphia, R. S. Sutton of Pittsburg, W. H. Wathen, Louisville, Howard A. Kelly and Dr. Howard representing Baltimore, while California was ably represented by Beverly MacMonagle of San Francisco.

This list by no means includes the speakers taking part in the meeting, only the ones better known through the journals.

The ball was set rolling by Howard A. Kelly's paper on his Ureteral Work, which affords a wonderful aid in diagnosis of obscure renal diseases.

The papers of Dr. S. C. Gordon on Supra-pubic Hysterectomy for Fibroids of Uterus, and of Dr. T. Addis Emmet on the Vaginal Method for Removal of Uterine Fibroids by Morcellation, created the liveliest discussion and the lines were sharply drawn.

The guest of the meeting was the distinguished pelvic surgeon, Charles Jacobs of Brussels, Belgium, who came across to this meeting and read a fine paper on Vaginal Hysterectomy and gave results of 403 such operations, with but 12 deaths. He says continental surgeons are so well satisfied with their results that being less progressive than Americans, they have not explored nor used sufficiently the abdominal route.

He received the greatest attention, his paper being read in English by his friend, Fernand Henrotin of Chicago. After a long and very interesting discussion, while the majority advocated the supra-pubic route, still the concensus of opinion seemed to be that each operation had its advantages and limitations and each case must decide the method for itself. There seems to be a growing tendency toward the vaginal method if the number of the more conservative men is an index.

The papers of most interest to the man in general practice were those of J. H. Etheridge of Chicago, on "Renal Insufficiency" and Thad. A. Reamy of Cincinnati, Ohio, and Edw. P. Davis of Philadelphia, on "Puerperal Eclampsia and its prevention;" Willis E. Ford of Utica, on "Ultimate results of Trachelorrhaphy" from a neurological standpoint, and Ely Van de Warker of Syracuse, N. Y. on "True Pelvic Cellulitis." These all elicited spirited discussions. Dr. Henrotin's paper on "Conservative Treatment of Septic Pelvic Disease" was one of the most instructive and valuable of the whole meeting, and the writer was one of the best off hand talkers present. Among such a collection of men comparisons are invidious. Howard A Kelly operated two days, before the society at Johns Hopkins Hospital, and gave members every opportunity to see his most recent work in pelvic and bladder surgery, which was a revelation to many.

The hospitality and courtesies extended by the Baltimore Obstetrical Society collectively and individually were beyond words to express and thoroughly enjoyed and appreciated and the meeting pronounced the best yet held in point of merit of papers, attendance and general good time had. These hard worked Doctors were like school boys off for a vacation; would fight each other in discussion (always fair) and then pick each other up and laugh over differences of opinion; nothing could exceed the manner in which the younger men differed from their distinguished elder, Dr. T. Addis Emmet; they stated their differ-

ences of opinion, but begged the old man's pardon for differing from him. It was very touching and not the usual latter day manner of Americans.

After the meeting closed. Dr. Chas. Jacobs was taken in charge by Drs. Etheridge and Henrotin and escorted to Chicago, where he will be entertained, as Chicagoans know so well how to do. The Society elected for its President, W. M. Polk of New York, and will hold its next annual meeting there. The great success of the meeting was largely due to the efforts of its efficient Secretary and President.

The personal factor comes into all these assemblys, and to see and know personally the writers and teachers of the country make their future work of much more value to you as a reader, you know better how much to attach to each one's opinion after having seen and heard him at a meeting such as the one just closed.

Very truly yours,

WM. LEMOYNE WILLS.

Programme of the Twentieth Annual Meeting of the American Gynecological Society, held in Baltimore, May 28, 29 and 30th, 1895.

President, Matthew D. Mann, Buffalo. Secretary, Henry C. Coe, New York.

PAPERS.

1. Recent Experience in Ureteral Work, by Dr. Howard A. Kelly, Baltimore.
2. Suprapubic Hysterectomy, by Dr. B. Baer, Philadelphia.
3. Hysterectomy for Uterine Fibroids, by Dr. S. C. Gordon, Portland, Maine.
4. The Use of Traction and Morcellation for the removal of Fibroids, by Dr. T. Addis Emmet, New York.
5. Ligation of the Pedicle with Catgut, by Dr. Archibald MacLaren, St. Paul.
6. Abdominal Section for Puerperal Septicemia, by Dr. J. Montgomery Baldy, Philadelphia.
7. The Present Treatment of Uterine Displacements, by Dr. Paul F. Mundé, New York.
8. Alexander's Operation, by Dr. Clement Cleveland, New York.
9. My Experience with Ventro-fixation and Alexander's Operation, by Dr. A. Lapthorne Smith, Montreal.
10. President's Address.
11. Renal Insufficiency in Gynecological Cases, by Dr. James H. Etheridge, Chicago.
12. Total Extirpation of the Uterus, by Dr. Charles Jacobs, Brussels.
13. Vaginal Hysterectomy for Conditions other than Suppuration and Malignant Disease, by Dr. Ernest W. Cushing, Boston.
13. Vaginal Hysterectomy for Uterine Myomata and diseases of the Adnexa, by Dr. William H. Wathen, Louisville.
15. Specimens Removed by Vaginal and Abdominal Hysterectomy, by Dr. R. Stansbury Sutton, Pittsburgh.
15. The Treatment of Puerperal Eclampsia, by Dr. Thaddeus A. Reamy, Cincinnati.
17. The Prophylaxis and Treatment of Eclampsia, by Dr. Edward P. Davis, Philadelphia.
18. Deep Incision of the Parturient Cervix for Rapid Delivery, by Dr. J. Clifton Edgar, New York.
19. Trachoma of the Female Genito-urinary Tract, by Dr. Arthur W. Johnstone, Cincinnati,
20. Conservative Surgical Treatment of Septic Pelvic Disease, by Dr. Fernand Henrotin, Chicago.
21. The Ultimate Results of Trachelorrhaphy, by Dr. Willis E. Ford, Utica.
22. True Pelvic Cellulitis, by Dr. Ely Van de Warker, Syracuse.
23. Prevention of Uterine Disease due to Childbearing, by, Dr. W. Gill Wylie, New York.
24. Deciduoma Malignum, by Dr. J. Whitridge Williams, Baltimore.
25. The Value of Gauze Drainage, by Dr. Henry C. Coe, New York.
26. Symphysiotomy in Canada and the United States, by Dr. Robert P. Harris, Philadelphia.
27. Late Infection in the Puerperal State, by Dr. Egbert A. Grandin, New York.
28. Artificial Abortion, by Dr. Henry J. Garrigues, New York.
29. In Memoriam — Dr. William Goodell, by Dr. Barton C. Hirst, Philadelphia.

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EDITORIAL.

AFTER THE SESSION.

The meeting of the Southern California Medical Society held in Los Angeles and Catalina was a most successful one. The feast of medical reason and flow of surgical soul was thoroughly enjoyed by all. Even the trip across the channel to Avalon was pleasant, old Neptune being in a very mild mood, and the inhabitants of the sea, from flying fish to whales, were frequently observed inspecting the wonder of seeing a hundred doctors all agreed on a single point.

Those who were present at the sessions of the state society at San Francisco and the Southern Association in Los Angeles, were of the opinion that the latter meeting was fully equal to the former both in numbers and enthusiasm. The Chamber of Commerce hall was filled at the sessions held there, and fully as many visitors as members accompanied the excursion. The committee of arrangements carried out the program fully and satisfactorily, the chairman in his exuberance even dropping into poetry.

There is nothing in this world but what could be improved, so it is not out of order to criticize some features of the meetings. Firstly, experience shows that the Chamber of Commerce rooms are too noisy in the daytime; secondly,

some of the writers and disputants occupy too much time; and thirdly, the program contained too many papers. The last objection was nearly overcome by absenteeism, yet two papers in each department would be sufficient. The first can be easily obviated by hiring a quiet hall, but the second fault is one so inherent in the nature of man that it can be rendered tolerable only by diligent pruning. How the torrent of medical words can be successfully *dammed* is a question that bothers not the member of this society alone. We would suggest that a new office be created — that of grand worthy chestnut bell-ringer — whose duty it shall be to give a gentle alarm at fifteen minutes on every paper and five minutes on each disputant, and if not heeded, to sound the gong vigorously at the expiration of another minute. Possibly our new secretary, who is sporty enough to carry a stop watch, can utilize it by seeing that things begin and close on time; at any rate, we see no harm in his striking a call bell when the allotted time has been occupied by any speaker.

At this session there were fifteen papers read, and six discussed; the other nine, including those on surgery receiving but a bare mention. Fairness to all demands adequate time for each; we assemble to discuss topics under ten departments and not under three or four.

The following officers were elected for the ensuing year: President, Dr. Geo. L. Cole; vice-presidents, Dr. F. R. Burnham, Dr. O. D. Fitzgerald; secretary and treasurer, Dr. H. Bert Ellis. In the selection of Dr. Cole the society loses an efficient secretary to gain a fine president. All success to his administration. The next session will be held in Los Angeles in December. The members of the State Board of Health were present and expressed themselves as highly pleased with the meetings.

A MALPRACTICE SUIT.

Los Angeles has just had another malpractice suit. An impecunious family—did ever a well-to-do person bring a suit—attempted to feather their nests with $15,000, belonging to Dr. Chas. Pratt, of University. While the results of the operation, on account of lack of nursing and cleanliness, were not all to be desired, it could be readily made perfect by a secondary procedure. The operation was merely a circumcision which left the boy in a much better condition than before. However, as Dr. Pratt is a successful physician, it is presumed he has considerable money, so the family, egged on, it is said, by a local practitioner who has not been so successful as Dr. Pratt, and also supported in the trial by an eclectic importation from Missouri, finally succeeded in getting a verdict for $1,000.

BIRTH AND DEATH CERTIFICATES.

In April 1894 we had occasion to stir up the careless physician on the matter of writing death certificates; the present health officer complains of the same difficulty as did his predecessor. A new ordinance compelling the physician to file a certificate at the health office is in contemplation. The various cemetery associations are working in unison and refuse to bury anyone without a permit, so by working at both ends the authorities hope to be able to discover all deaths. The health officer is quite stringent in his rules, as indeed he ought to be. The records are of value only in proportion to their accuracy.

In the matter of births there still exists great deficiency of registration. Fully one-half of the infants born in Los Angeles are never recorded. The

American new woman has few enough children so let them all be counted. A few fines would spur up the delinquent doctors — and they are not all irregulars either.

THE INDEX MEDICUS.

In the cessation of the publication of the Index Medicus, the profession of America has met a great loss. How great it is, now is impossible to tell. It does not speak well for the general intelligence of the profession that their patronage was so small that it could not exist thereby. Those who have depended upon it will feel the loss deeply; all will be injured by its suspension, even though they may not realize the fact. We hope that the united efforts of the journals and leading physicians may create so great a demand for such a publication, that the Index Medicus may be revived.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF SOUTHERN CALIFORNIA.

The medical college in this city is now a self-supporting institution. This past year it had enrolled fifty-three students and graduated a class of ten. The faculty have formed a joint stock company, purchased a suitable lot, on the main electric line, not far from the geographical center of the city—the Plaza—and easily accessible to those who usually patronize clinics. It is proposed this summer to put up a suitable college building, with laboratories and lecture halls to accommodate two hundred students, and also to commence a college hospital. This, the faculty are doing themselves, without the promise of gifts from anyone, though anything from one to a hundred thousand dollars would be accepted and put to an appropriate use. For the past ten years this institution has done a great deal for the poor in this city, and has done the work so modestly that it is news to many that there is such a thing as a medical college and free dispensary here. But now with an adequate building on a main thoroughfare, the good work will be better known.

EDITORIAL NOTES.

Dr. C. Smith has recently located at Nogales, Arizona.

Dr. G. W. Lasher has gone East for a two month's visit.

Dr. F. F. Rowland, of Pasadena, has returned from the East.

Dr. W. Le Moyne Wills has returned after a two month's trip of profit and pleasure in the East.

Dr. C. Wright, of Benson, Arizona, is about to locate in Minas Prietas where a wider field awaits him.

The Orange County Medical Association is flourishing; Dr. Bradshaw read a paper at the last meeting.

Dr. J. P. Frizell has returned to Escondido from Los Angeles and will make his home there in the future.

Dr. W. H. Rudd has located at Glendale, Arizona.

Dr. Baum has returned to Phœnix, Arizona, after a three years' course in Rush Medical College, Chicago.

Dr. T R. Orella, of Santa Barbara, has returned home after pursuing his medical studies in Europe. He will locate in San Francisco.

Dr. R. W. Haynes has returned after an absence of three months spent in Mexico and other southern points. He had started to New York, going by water, but was taken sick and unavoidably prevented from pursuing his journey farther.

We wish to call attention to the June issue of the *American Gynecological and Obstetrical Journal* which comes to us with 304 pages devoted to the American Gynecological Society. It contains a majority of all the papers read, in the original, and full abstracts (prepared by the authors) of all the others, together with a verbatim report of the full discussion. It is especially valuable as it gives, in one number, the latest opinions on a variety of subjects of our most prominent men in that specialty.

BOOK REVIEWS.

IMMUNITY, PROTECTIVE INOCULATIONS IN INFECTIOUS DISEASES, AND SERUM-THERAPY. By George M. Sternberg, M. D., L L. D., Surgeon-General U. S. Army, ex-President American Public Health Association, Honorary Mem ber of the Epidemiological Society of London, of the Royal Academy of Medicine at Rome, of the Academy of Medicine at Rio Janeiro, of the Societe d'Hygiene, etc., etc. One volume, 325 pages, octavo, bound in extra muslin, beveled edges, uniform with the other volumes of our Medical Practitioners' Library, price $2.50; in flexible morocco, $3.25. William Wood & Co.

It is the busy man who can always find time to do extra work, so Surgeon General Sternberg has undertaken this book as a labor of love. In the preface he says he "has endeavored to give a summary of the most important experimental evidence in the field of research to which it relates. Comparatively little space has been given to the discussion of the unsolved questions connected with the subject, nor has it been possible to review the entire literature; but the most important results of experiments made by competent bacteriologists, have been stated as concisely as possible. In the bibliography the titles of many valuable papers will be found."

The first part of the book is taken up by two articles on immunity, natural and acquired, the general conclusion being that the germicidal action of blood serum depends on the specific property of a chemical substance having its origin in the leucocytes and soluble only in an alkaline medium, that substance being a complex proteid body or nuclein. In this view Sternberg agrees with Dr. Vaughan.

In the second article Dr. Sternberg says "recent researches indicate that the principle factor in the production of acquired immunity is the presence in the blood of the immune animal of some substance capable of neutralizing the toxic products of the particular pathogenic micro-organism against which immunity exists, or of destroying the germ itself. Such substances are called antitoxins."

After an interesting, thorough, authoritative, yet concise handling of the general question of immunity in the first twenty pages, the author discusses protective inoculations and serum therapy in particular diseases of which he mentions twenty-two, viz: Anthrax, Chicken Cholera, Cholera, Diphtheria, Foot

and Mouth diseases, Glanders, Hog Cholera, Hog Erysipelas, Hydrophobia, Influenza, Influenza of Horses, Pleuro-pneumonia of Cattle, Pneumonia, Rinderpest, Small Pox, Swin plague, Streptococcus infection, "Black leg," Tetanus, Tuberculosis, Typhoid Fever and Yellow Fever.

In regard to diphtheria, the author says it appears to be established that the antitoxin treatment is of value where applied before the disease has progressed too far. This also seems to be the general opinion of the profession. Under pneumonia he quotes Emmerich's hopeful predictions "That the active substance in the serum of immune animals will also sometime prove to have an ideal curative power for man is beyond doubt and only a question of time." This is we believe a general principle. We are now about to see the dawn of that day. No American is better prepared than Sternberg to herald its approach, the blast blown by this book is already music for the listening physician. This is the best book on the topic the reviewer has ever seen. It is particularly opportune at this time, and although just received, we hasten to present it to our readers, for it contains much of value and interest on the great medical topic of the day, and that which we hope will place medicine on equal footing with surgery.

A BOOK OF DETACHABLE DIET LISTS FOR ALBUMINURIA, ANEMIA, and Debility, Constipation, Diabetes, Diarrhoea, Dyspepsia, Fevers, Gout, or Uric Acid, Diathesis, Obesity, Tuberculosis, and a Sick-Room Dietary compiled by Jerome B. Thomas, A.B., M.D. Visiting Physician to the Home for Friendless Women and Children, and the News-Boys' Home, etc. Published by W. B. Saunders, 925 Walnut St., Philadelphia, 1895. Price, $1.50.

The importance of correct diet cannot be overestimated; many a physician, although having a theoretical knowledge of what a man should or should not eat, often has not the time to write out a lengthy, palatable and sufficient diet. Here comes a prescription book with a list suited to the various diseases. It is handy, carefully selected as to its contents, and a much better list than the busy practitioner can carry in his mind—he has but to tear off the proper slip—running the pencil through anything which the special case ought not have. Each blank is marked "Strictly Personal and Private, Adapted Only for the Present Time and this Particular Case." So mere routine practice is not encouraged. We think this is an excellent innovation—the patient will look upon the diet as a prescription and try to carry it out accordingly. The doctor will not omit important items, and what is of great value will also put before the patient what he must *avoid*.

THE OVERLAND MONTHLY for July begins a new volume, the twenty-sixth of the new series, and signalizes the birthday of the magazine by issuing a heavily illustrated number, that will be notable even among the recent brilliant numbers of the old magazine. In "Our Spanish American Families," Mrs. Helen Elliot Bandini recites the story of the original Californians, their prominent families and what has become of them. "The Coeur d'Aléne Mining Riots of 1894" is an account of the great Miners' Union strikes and riots, by a regular army officer. "Some San Francisco Illustrators," tells about the real Bohemians of the city, with abundant examples of their work. "Well Worn Trails" is the first of a new series of articles by the Editor, Mr. Rounseville Wildman, treating of the picturesque features of California with a lavish show of pictures. This paper concerns itself with the Santa Barbara Flower Festival. There are also brilliant stories by Vachell and Batterman Lindsay and others.

PAMPHLETS RECEIVED.

LAMINECTOMY FOR PARAPLEGIA FROM POTTS DISEASE: AMPUTATION AT THE HIP-JOINT; APPENDICITIS, ETC. By F. C. Shaefer, M.D., Chicago. Reprinted from the International Medical Magazine, July 28, 1894.

TREATMENT OF DISEASES OF THE ALIMENTARY CANAL. By Jas. O. DeDourcy, M.D., St. Libory, Ill. Reprinted from Jour. Amer. Med. Ass'n., July 28, 1894.

A NEW METHOD EOR ANCHORING THE KIDNEY. THE DIAGNOSIS AND TREATMENT OF FLOATING KIDNEY. By R. Harvey Reed, M.D., Columbus, O. Reprints from Jour. Amer. Med. Ass'n., December 22 1894, and Columbus Med. Jour. April, 1894.

NEW YORK LETTERS ON ORTHOPEDIC SURGERY OLD AND NEGLECTED DEFORMITIES FOLLOWING INFANTILE SPINAL PARALYSIS. By S. L. McCurdy, A.M., M.D., Pittsburgh, Pa. Reprinted from Columbus Med. Jour., June 1894.

THE USE OF TRACTION IN THE TREATMENT OF JOINT DISEASES. A RETAINING SPLINT FOR EXCISIONS OF THE HIP-JOINT. By S. L. McCurdy, A.M., M.D. Reprinted from Pittsburgh Medical Review, Sept., 1894.

RIPENING OF IMMATURE CATARACT BY DIRECT TRITURATION. By Boerne Betmann, M.D., Chicago. Reprinted from the Annals of Opth. and Otol., January, 1895.

THIERSCH'S GRAFT IN EXTENSIVE DESTRUCTION OF SOFT PARTS ABOUT LARGE JOINTS. By Henry W. Coe, M.D., Portland, Oregon. Reprinted from Medical Sentinel, Sept. 1894.

CASE OF FRACTURE OF THYROID CARTILAGE.—RECOVERY WITHOUT TRACHEOTOMY. By Thos. B. Eastmann, A.M., M.D., Indianapolis, Ind. Reprinted from Jour. Amer. Med. Ass'n., February 2, 1895.

THE HALO, OR RAINBOW SYMPTOMS IN GLAUCOMA. BY JOS. D. WILLETS, M. D., Pittsburgh.

BICYCLING FOR WOMEN. BY R. L. DICKINSON, M.D., NEW YORK. REPRINT FROM American Journal of Obstetrics. Vol. xxx, No. 1, 1895.

TROPHIC LESIONS OF THE JAWS IN TABES DORSALIS. BY LEO. NEWMARK, M.D., San Francisco. Reprint from Medical News, Jan. 26, 1895.

ANNUAL REPORT OF CLINICS OF 1894 OF COOPER MEDICAL COLLEGE, SAN FRANCISCO.

CAN PHYSICIANS HONORABLY ACCEPT COMMISSIONS FROM ORTHOPEDIC INSTRUMENT MAKERS? B. H. Augustus Wilson, A.M., M.D., Philadelphia. Reprint from Philadelphia Polyclinic.

LESIONS OF THE SENSORY FIBERS OF THE INTERNAL CAPSULE. BY H. G. BRAINERD, M.D., Los Hngeles. Reprint from Journal Amer. Med. Association, July 28, 1894.

A COMMON INJURY OF THE NERVOUS SYSTEM OF THE MODERN CHILD. BY NORMAN BRIDGE, A.M., M.D., Los Angeles. Reprint from Jour. Amer. Med. Ass'n, Fed. 23, 1895.

THE COMPLETE METHOD OF OPERATION IN CASES OF CANCER OF THE BREAST. BY Dr. A. C. Bernays, St. Louis, Mo. Reprint from Courier of Medicine, Jan. 1895.

SUBVOLUTION—A NEW PTERYGIUM OPERATION. BY BOERNE BETTMAN, M.D., Chicago. Reprint from Jour. Amer. Med. Ass'n., March 24, 1894.

MONTHLY METEOROLOGICAL SUMMARY.

U. S. WEATHER BUREAU, LOS ANGELES STATION.

Los Angeles, California. *Month of May, 1895.*

Date	TEMPERATURE Max.	Min.	Mean	Precipitation in inches and hundredths
1	63	55	59	.01
2	65	53	59	.12
3	68	48	58	0
4	70	47	58	0
5	88	53	70	0
6	86	55	70	0
7	88	54	71	0
8	85	52	68	0
9	78	55	66	0
10	86	53	70	0
11	80	50	65	0
12	74	53	64	0
13	76	54	65	0
14	70	56	63	T
15	74	56	75	.01
16	74	54	64	T
17	73	55	64	T
18	68	55	62	0
19	64	56	60	.05
20	70	56	64	0
21	70	57	61	0
22	73	49	61	0
23	71	52	62	0
24	72	55	64	0
25	72	55	64	0
26	74	51	64	0
27	70	57	64	0
28	66	48	57	0
29	78	54	66	0
30	75	50	62	0
31	69	52	60	

SUMMARY

MONTHLY RANGE OF BAROMETER:

Mean Barometer, 29.94.
Highest barometer, 30.08, date 30.
Lowest barometer, 29.80, date 27.
Mean Temperature, 64°.
Highest temperature 88°, date 5.
Lowest temperature 47°, date 4.
Greatest daily range of temperature 35°, date 7.
Least daily range of temperature 8°, date 19.

MEAN TEMPERATURE FOR THIS MONTH IN

1877		1883	64°	1889		63°
1878	63°	1884	63°	1890		63°
1879	62°	1885	66°	1891		62°
1880	63°	1886	65°	1892		62°
1881	64°	1887	64°	1893		63°
1882	64°	1888	63°	1894		60°
				1895		64°

Mean temperature for this month for 17 years, 63°
Total deficiency in temp. during the month, °
Total deficiency in temp. since Jan. 1. 54°
Prevailing direction of wind, West.
Total movement of wind, 2958 miles.
Maximum velocity of wind, direction, and date, 26m, W. 29th.
Total Precipitation, .19 inches.
Number of days on which .01 inch or more of precipitation fell, 4.

TOTAL PRECIPITATION FOR THIS MONTH IN

1878	.66	1884	.39	1890		0
1879	.24	1885	.06	1891		.31
1880	.04	1886	0	1892		2.07
1881	.01	1887	.20	1893		.06
1882	.63	1888	.05	1894		.20
1883	2.02	1889	.65	1895		.19

Average precip'n for this month for 17 years, .38.
Total deficiency in precip'n during month .19
Total precip'n from Sept. 1,'94, to date, 16.09 inches.
Averge precip'n from Sept. 1,'94, to date, 18.19 inch.
Total deficiency from Sept. 1,'94, to date, 2.10 in.
Average rainfall for 10 wet seasons, 21.58 inches.
Number of clear days, 9.
" partly cloudy days, 19.
" cloudy days, 3.

NOTE—Barometer reduced to sea level. "T" indicates trace of precipitation.

METEOROLOGICAL SUMMARY SOUTHERN CAL., MAY, 1895.

STATIONS	TEMPERATURE Mean	Max.	Min.	Mean Barometer	Relative Humidity	RAINFALL Days	Am't	WEATHER Clear	Fair	Cld'y	WIND Direction	Total Mov't
Los Angeles	64.	88.	47	29.94	76.	4	.19	9	19	3	W	2,958
San Diego	62.	80.	51.	29.95	77.	2	.19	14	11	6	W	4,318
Santa Barbara	60.5	81.	46.		72.	2	.02	17	6	8	SE	3,508
Yuma	79.	109.	54.	29.78	33.		.00	27	4	0	SW	5,922
Arlington Heights	66.0	97.	42.			0	.00	14	15	1	W	
Ontario	69.0	95.	51.			1	0.30	15	9	7	W	
Pasadena	64.0	89.	44.			6	0.41	15	12	4	SW	
Redlands	68.2	96.	50.				0.45				W	
San Bernardino	66.0	95.	42.		72.	1	0.44	17	11	3	W	
Santa Ana	69.1	88.	54.				0.10				SW	

OBSERVERS.—George E. Franklin, U. S. Weather Bureau, Los Angeles; M. L. Hearne, U. S. Weather Bureau, San Diego; Hugh D. Vail, Santa Barbara; A. Ashenberger, U. S. Weather Bureau, Yuma. JAMES A. BARWICK, Director California Weather Service, Sacramento, Cal.

REGISTERED MORTALITY OF LOS ANGELES.

WITH SEX AND NATIVITY OF DECEDENTS.

Estimated Population, 75,000. *May, 1895.*

CAUSE OF DEATH	Total Deaths	Annual rate per 1000	SEX		NATIVITY				RACE		
			Male	Female	Los Angeles	Pacific Coast	Atlantic States	Foreign Born	Caucasian	African	Mongol
Deaths from all causes	90	14.04	57	39	20	13	30	32	93		3
Deaths under 5 years	23										
i. Specific infectious diseases	23		15	8	5	3	8	7	23		
ii. Diseases of digestive system	14		7	7	8	2	2	2	13		1
iii. Diseases of respiratory system	21		13	8	3	3	9	6	20		1
iv. Diseases of nervous system	5		1	4	2	2	1		5		
v. Diseases of circulatory system, blood and ductless glands	11		8	3	1		4	6	11		
vi. Diseases of genito-urinary org'ns	7		3	4			4	3	6		1
vii. Constitutional diseases	4		4			1		3	4		
viii. Intoxication, violence, accidents	6		4	2		1	2	3	6		
ix. Miscellaneous diseases	5		2	3	1	1		3	5		
i. Septicæmia	1		1				1		1		
Pyæmia											
Diphtheria	1		1			1			1		
Erysipelas											
Typhus fever											
Typhoid fever	2		2					2	2		
Malarial fever	1			1	1				1		
Scarlet fever											
Measles											
Cerebro-spinal meningitis	5		3	2	3		2		5		
Smallpox											
Tuberculosis	10		6	4		2	4	4	10		
Influenza	1			1	1				1		
Dysentery	2		2				1	1	2		
Syphilis											
Tetanus											
ii. Diseases of the œsophagus											
Gastritis	3		1	2	2		1		3		
Gastro-enteritis	1			1		1			1		
Cholera infantum	2		1	1	1	1			2		
Enteritis											
Appendicitis	1			1			1		1		
Intestinal obstruction											
Diseases of liver	2		1	1				2	1		1
Peritonitis	1		1				1		1		
iii. Membranous croup											
Bronchitis	2		1	1	1			1	2		
Pneumonitis	5		3	2	1	2	2		5		
Pleuritis											
Phthisis	14		9	5	1	1	7	5	13		1
iv. Diseases of brain	3			3	2	1			3		
Diseases of spinal cord											
Eclampsia											
Epilepsy	1			1		1			1		
v. Diseases of heart	10		7	3	1		4	5	10		
Degeneration of arteries	1		1					1	1		
Aneurism											
Anaemia											
vi. Uraemia	1			1			1		1		
Acute Bright's disease											
Chronic Bright's disease	3		2	1				3	2		1
Diseases of genital-organs	1			1			1		1		
vii. Rheumatism											
Gout											
Diabetes											
Inanition	1		1			1			1		
Senility and Asthenia	3		3					3	3		
viii. Alcoholism											
Opium habit											
Suicide	1		1				1		1		
Violence and accidents	4		2	2		1	1	2	4		
ix. Tumors—malignant											
Tumors—non-malignant	2		1	1				1	2		
Other diseases	3		1	2	1	1		1	3		

F. W. Steddom, M.D., Health Officer.

OUR ADVERTISERS.

PHYTOLINE.— The bottle of Phytoline I received from you a short time ago reduced a gentleman's weight from 228 to 215 pounds, also has, in his case, overcome muscular pain of a rheumatic character. J. F. SNYDER, M. D.,
Jacobus, Pa.

THE success that has followed the use of Codliver Glycerine in so great a range of diseases, that cod liver oil has never been considered useful in, is due to the fact that it increases the patient's physical power of resistance, placing nature in a position to combat disease.

MESSRS. WM. R. WARNER & CO., have removed their New York Branch to the more commodious and convenient quarters at No 52 Maiden Lane. This change became imperative, the space at their former salesrooms having at last become inadequate to admit of the proper conduction of their largely increased business. There will constantly be on file a complete list of the leading Medical and Pharmaceutical Journals of the United States, and a cordial invitation is extended to the profession to consult them at any time.

A REMARKABLE CASE OF INCONTINENCE OF URINE IN A CHILD.— Four months ago I treated a remarkable case of incontinence of urine in a child. It was seven months old, and had urinated from fifteen to twenty times every night since it was born, requiring its wrappers to be changed that often. I gave it one-third of a teaspoonfull of Sanmetto four times a day, and before one bottle was used the babe was well, and it still remains so. In the last two years I have used several dozen bottles of Sanmetto in the treatment of various affections of the genito-urinary organs, and with the most gratifying results.
E. S. ATHEARN, M. D., North English, Iowa.

PINEOLINE IN ERYSIPELAS.— My experience with Pineoline proves that it will cure Erysipelas as well as Eczema and Hemorrhoids. A case of Erysipelas of the face in the case of a woman of fifty-five, was cured in one week's time. I applied the ointment well over and beyond the inflamed area and kept the part constantly protected. I cannot say that the result was surprising, for one familiar with the remarkable properties of Pinus Pumilio must be prepared for surprising results. It allayed the itching and burning, prevented the formation of bullæ, and caused prompt resolution. As an antiseptic and anodyne application Pinus Pumilio (Pineoline) is unexcelled. G. H. THOMPSON, M. D., professor of Materia Medica, College of P. and S.

DISTURBANCES OF INNERVATION.— Robert B. McCall, M. D., *Medical College of Ohio*, Cincinnati, now residing at Hammersville, Ohio, writes:

"My confidence in antikamnia is so well established that I have only words of praise. Independently of other observers I have proved to my satisfaction its certain value as a promoter of parturition, whether typical, delayed or complicated, and its effectiveness in controlling the vomiting of pregnancy. In cases marked by unusual suffering in second stage, pains of nagging sort, frequent or separated by prolonged intervals, accompanied by nervous rigors and

mental forebodings, one or two doses, three or five grains each, of antikamnia promptly changes all this. If there is a 'sleepy uterus' antikamnia and quinine awake every energy, muscular and nervous, and push labor to an early safe conclusion. Indeed, in any case of labor small doses are helpful, confirming efforts of nature and shortening duration of process. I have just finished treatment of an obstinate case of vomiting in pregnancy. A week ago the first dose of antikamnia was given, nervous excitement, mental worry and gastric intolerance rapidly yielded. This case was a typical one and the result is clearly attributable to the masterful influence of your preparation. If there is any one drug or preparation that can be made to answer every need of the physician, for the correction of the multitudinous disturbances of innervation that occur in the various diseases he is called upon to treat, that one is antikamnia."

Increasing the Weight.— Much has been said and written about the treatment of obesity, but the poor, anæmic, animated skeletons whom we see on every hand, are more or less neglected. It is folly to hope that the administration of minute quantities of iron or other so-called tonics will put flesh on a patient's bones. Food is their only salvatiou, and if they cannot digest it in its ordinary forms, then it must be artificially digested outside of the body.

The intelligent doctor tells the man who is laboring through life with a hundred pounds of superfluous flesh to leave starchy foods out of his diet. If the advice is conscientiously followed, a marked loss of weight must ensue.

While in theory the reverse is true of a thin person, they unhappily cannot always digest starchy foods, and here it is that science has come to the rescue. Methods for the artificial digestion of starch have long been known, but it remained for the manufacturers of Paskola to give the profession a preparation which is perfectly palatable, and the use of which can therefore be indefinitely continued without offending even the most delicate stomachs. Not alone is Paskola a fattening food of exceptional value, but, containing as it does a normal proportion of hydrochloric acid and proteid or meat-digesting ferments, it aids the digestion of other foods. Its sphere of usefulness is a broad one, for every day brings us face to face with this problem of nutrition, and Paskola would appear to offer a practical solution.— *Daily Lancet.*

The effect of Peptenzyme in the treatment of Intestinal Summer Diseases of Children is so immediate and positive that but little other medication will be required. Being a physiological product, it acts by physiological methods in the organism. Its remedial effect is the restoration of function, not the arrest of symptoms.

No other preparation of Pepsin or compound of Pepsin and Pancreatine has any such specific action in this disease.

Elixir Peptenzyme digests as much coagulated albumen in an acid menstruum as any of the *Liquid Pepsins or Pepsin Compounds* in use, and five times more than some of them, which is the only property they have. In addition to this, Elixir Peptenzyme acts in any menstruum, digests all varieties of food, and contains the latent or mother enzymes as well as the active ferments.

SOUTHERN CALIFORNIA PRACTITIONER.

VOL. X. LOS ANGELES, JULY, 1895 NO. 7

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ORIGINAL.

REMARKS ON CERTAIN GYNECOLOGICAL PROCEDURES.*

BY D. B. VAN SLYCK, M.D., PASADENA, CAL.

The principal object of this brief paper is to emphasize the importance of giving due consideration to the condition of the endometrium in all surgical operations on the pelvic organs.

Congestion, active or passive, undoubtedly precedes all inflammatory conditions, and in the ultimate analysis of the latter the concensus of the best medical opinion seems to be that pathogenic germs play an active part in their causation, perpetuation and extension.

There are few, if any, diseased conditions of the pelvic viscera, I think, requiring surgical interference, which are not preceded, or at least accompanied, by endometritis. Whether the first cause be mechanical, as in a narrow os and in displacements and flexions; whether traumatic, puerperal, or specific, the cavity of the uterus becomes a culture bed of germs and a focus of infection. Cellulitis, abscess, hydro and pyosalpinx and oophoritis, are but outposts occupied by detachments of the armies of hostile germs, whose main body is intrenched in the uterus. It is the height of unreason, therefore, to expect to cure patients by perineorrhaphy, trachelorrhaphy, or the removal of the appendages, or to hope materially to better the condition of those suffering from displacements by any sort of treatment, while the endometrium continues the seat of serious disease.

* Read at the Fifteenth Semi-Annual meeting of the Southern California Medical Society, held a Los Angeles and Catalina, June 5 and 6, 1895.

The endometritis must be cured either before, during, or subsequent to any of these procedures, or the results will surely be disappointing, affording only partial or temporary relief and more often ending in total failure, or even worse than failure.

A few months ago I was consulted by a lady who had been a great sufferer from pelvic disease for about eight years—ever since the birth of her first child. The labor was instrumental and produced laceration of the cervix and perineum, the latter just short of being complete. About a year before coming to California she was operated on for the repair of these lesions, but greatly to her disappointment without benefit except for a short time. She was not sure, but thought a curetting was done at the time. I found an enlarged and extremely tender uterus, and a profuse purulent discharge from the os. The menstrual flow was excessive for four or five days, and lingered intermittently for many more. Dilation of the cervix, with thorough curettage and drainage, and a few weeks' after treatment effected a substantial cure.

It is certainly extremely illogical to repair the cervix in the presence of an endometritis without curetting the uterine cavity, and equally so to curette and immediately proceed to make free drainage impossible by narrowing the cervical canal by trachelorrhaphy. A few years ago, I know this was frequently, perhaps generally, done, but I hope the practice is now, or soon will be, obsolete. A week or more, according to the nature of the case, should intervene between curettage and operation on the cervix. Nine times out of ten the patient's sufferings are due almost entirely to the endometritis, and very little, if at all, to the lacerations. We have all of us seen cases of laceration of both cervix and perineum absolutely without symptoms, but never where an endometritis was added to these lesions, though it must be admitted that the association of the two conditions is the rule.

Over two years ago I curetted two cases preparatory to a trachelorrhaphy. In one of them circumstances rendered any further operation impracticable. In the other, after four weeks' delay on various pretexts, she declined to have anything more done, as she believed herself entirely cured. Both these patients at present claim to be well and without symptoms of pelvic trouble. These examples are not given as an argument against trachelorrhaphy, but to prove that the concomitant endometritis is often, and perhaps always, the more serious pathological condition and should be so considered in practice.

A most distressing case of dysmenorrhea recently came under my notice. The patient had suffered a laceration of both the cervix and perineum in her first confinement three years ago. A year ago both were repaired in a Portland, Oregon, hospital. If a curetting was done at all it was at the time of operation. To the eye the result was perfect, but I found the os so tightly closed that I was unable to introduce the smallest uterine probe without resorting to an anesthetic, and, as all the symptoms of endometritis were present, I deferred the attempt, deciding to dilate

and curette at another time. This I subsequently did, and the one menstrual period since was passed without pain.

The lesson taught by this case is, that a proper interval should be allowed between the curetting and the operation on the cervix, and that we should also, by the use of dilators if necessary, (subsequently) make sure that we leave a sufficiently wide cervical canal.

About three years ago I was called in consultation to see a case of pelvic disease of gonorrheal origin, contracted from the patient's husband. She had been long confined to her bed, and her condition was truly pitiable. Both tubes could readily be made out as enlarged, and their removal was advised. A specialist was called, who coincided with this opinion, and a few weeks later did a celiotomy and removed the appendages on both sides. The uterus was curetted at the time, and as the endometritis persisted the operation was repeated later on. At present there is still a painful endometritis, but the patient's condition is much improved.

This case, as far as one case can, seems to confirm the opinion recently expressed by several eminent gynecologists, that chronic endometritis of specific origin is incurable, and if further experience should confirm this belief their advice to remove the uterus as well as the appendages in such cases is doubtless surgically sound. The question of how much the mortality would be thereby increased, would necessarily be an important factor in the decision in each case.

I will report more fully one more case in order to bring out a discussion of the treatment of cases of recent gonorrheal infection in women. January 25th, I was called to see Mrs. S., aged 28, married five years, had one child three years of age. She had always had excellent health, and never suffered from uterine disease of any sort. Before she left the East—two weeks before—she found, from the confession of her husband, that she had been exposed to gonorrheal infection. He admitted it in order to induce her to consult a physician who, on examination, gave a negative opinion. I found a mild vaginitis, slight urethritis, congested cervix, free, muco-purulent discharge from vagina and os, uterus very tender, and patient complained of much pain in that, and of a more severe one in the right ovarian region. To make the diagnosis sure I had some of the secretion examined by a microscopist, who reported abundant gonococci. I prescribed one douche daily of bichloride 1 to 3000 to be given in the morning, and another in the evening of sugar of lead, sulphate of zinc, alum, and boric acid in weak solution, gradually increasing its strength.

Every fourth day, after a douche of boiled water, a glass speculum of sufficient size to fully distend the vagina was introduced, and a solution of nitrate of silver, five grains to the ounce, was poured into it, and the instrument slowly withdrawn. Later the strength of the solution was increased to ten grains to the ounce. The day this was done no other douche was given for 24 hours.

By March 15th the vaginitis was cured, all visible mucous membrane

having a normal appearance. There was still a purulent discharge from the os, and the uterine and ovarian pain continued unabated.

March 21st I dilated the os and thoroughly curetted the uterus, swabbing it well with iodized phenol and packing with iodoform gauze. The packing was removed on the third day; three times afterwards, at intervals of four days, the interior of the uterus was treated with iodized phenol and bichloride douches used twice daily. The pain and tenderness continued much the same for about ten days, and then gradually subsided.

Before leaving for home, (April 20th), the patient was able to walk a mile or more without discomfort, and believed herself entirely cured. There was practically no discharge from the uterus or vagina after the curetting. It will be interesting to learn the future history of this case. It is not certain that the disease had actually invaded the right tube, but the pain and soreness seemed to indicate that it had. At any rate it seems, I think, fair to assume that the treatment prevented the extension of the infection beyond the uterus.

The subject of gonorrhea in women, and the dire and far-reaching results is a very important one, and too large to be further treated of in this paper.

THE HYGIENE OF CHILDHOOD.*

BY F. R. BURNHAM, M. D., SAN DIEGO, CAL.

Shakespeare has said: "What's in a name? That which we call a rose, by any other name would smell as sweet." If the title of this paper is misleading, I hope the aroma will still be perceptible. The trite maxim that a large and healthy population is the life and strength of the nation, and the source of its success in science, art, agriculture, and commerce, can hardly be quoted too often. In this paper I desire to speak concerning the care and training, both physical and mental, of the child from birth till puberty is established, a period covering fifteen or sixteen years; and especially to call your attention to what I consider two great danger-points in this period, viz: dentition and puberty. I am decidedly impressed with the belief, that the longevity of the English speaking people is materially shortened by mismanagement of this period of childhood.

This prodigy that we call a human offspring is causing, and has caused, more anxiety and sorrow, than all of the rest of the creation. According to the generally accepted opinions of the day, he is the result of progressive development, from the dawn of the first creative *fiat*. From the simple cell has been evolved the most complicated mechanism within the knowledge of man. To keep this human machine in order, to prevent wear and tear by misuse, to get the most and best work out of it, is the problem of the ages. Unlike an inanimate machine, our children do not come into our hands like the mighty Corliss engine, perfect and ready for use. True, the parts are all there, all in their proper place, and if cared for, in time, will do the most perfect and wonderful work. Our babies are born in a much more helpless state than the brute king-

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dom, unable even to get nourishment from the mother's breast without assistance; sight and hearing imperfect, months must pass before they can walk, and years before the brain can assume its imperial sway over the members of the body. About 35 per cent. die under five years of age. This enormous death rate, occurring at the very opening of life, out of all proportion to any succeeding period, (save extreme old age) would indicate either, that the evolutionary process had progressed too far, or that we are grossly ignorant or careless in the management of child-life. Let us be magnanimous and accept the latter alternative, and then with the strength of an honest resolution, see what can be done to save this young life, now so wantonly snatched from us. In the early part of this period first dentition occurs. After its completion the death rate falls, to rise again as puberty approaches. Although the mortality is less in the latter part of this period, yet if to the deaths be added those who, through nervous break-downs, become a burden upon others for years, and perhaps for the rest of a short life, the result is the same, viz.: a terrible drain upon the resources of a nation.

The child being safely in the world, the first great struggle with his new environment begins at about the seventh month. For the succeeding twelve or fifteen months, with many children, both parents and physician have their resources thoroughly tried. I know some authors claim that the disturbances of this period are in no way influenced by dentition. I am well aware that the irritation of the unerupted tooth caused by pressure upon the sensitive nerves and tissues of the inflamed gum, could only bring about these results through a condition of the nervous system predisposing to it. We should remember, however, that in the developing, and undeveloped nervous system of the child, we have precisely this condition. The inhibitory action of the brain over the spinal cord is still in abeyance, and reflex action is more uncontrolled. There is an exalted irritability of the spinal cord, hence these little patients are excellent subjects for the manifestation of the evil effects of a constant peripheral irritation, among the most frequent and potent of which is dentition. Henry W. Burg, speaking of the effects of dentition upon infantile paralysis, says: "There is no question but that the process of dentition throws the system of the child into a state of exalted irritability, during which eclampsia, tetanus, and other neuroses, are commonly observed."

Nothnagel attributes to the peripheral irritation of dentition some forms of eclamptic convulsions. West in this connection says: "The period of teething, like that of puberty, constitutes one of the great epochs of life; it is a time when great changes are going on in the whole organism. When the animal machine is in a state of increased activity its parts are more than usually apt to get out of order. The hazards of this period, like puberty, are overlooked. Constitutional disturbance is more common, and serious disease more frequent." Anyone who has reared a large family of healthy children, and witnessed the fever, irritable temper, loss of sleep, often gastro-intestinal disturbance, accompanying the eruption of every tooth, these being the only occasions when the children have not been healthy and happy, can but be impressed with the deleterious effect of the first dentition upon the whole being of the child. Six months ago I reported to this body a case of Infantile Spinal paralysis, one of the prominent causes of which was dentition. Those of us who have practiced in the Eastern states know well the dangers of the second summer with children. W. H. Flint, under the heading of sympathetic disorders of first Dentition says "that the predisposing cause of the diseases of childhood, in the

first two years, lies in the gradual depreciation of nervous energy, by the continued local irritation."

Barrier refers eclampsia, when excited by dentition to the causes just spoken of, and in addition to the participation of the whole cerebral vascular system in the hyperemia existing around the inflamed dental follicle. Some authorities hold that a physiological process cannot be connected with the production of so serious a pathological condition. But if excessive growth in a normal cell may result in a cancer cell, the perversion of function in one case is no greater than the other. It is a very common thing to see convulsions in children followed shortly by the eruption of one or more teeth.

The great mortality under twenty years of age we believe is largely due to the lack of appreciation of the fact that the instincts of the child in his early years are largely animal, that the great vital force of the baby must be devoted to growth, to the building up and nourishment of healthy bone, muscle and nerve. In other words, this is our building time. If we would make perfection in structure and function observe closely how nature has blocked out her work. If these statements be true, is it not the undoubted prerogative of the physician to use his influence and the prestige of the profession to correct the errors of this period? Are we not in honor bound to grapple with, and solve this problem? The mother must first be instructed, while carrying her unborn child, how to care for herself, that the most vigor of constitution may be transmitted to her offspring and that she be prepared to suckle her child at her own breasts; more depends on her ability to do this for the future safety and well-being of her child than any other one thing. "Rosson noticed a considerable difference in the increase in weight of infants according to the mode of rearing them: in the breast-fed the growth is more steady and always transcends that of hand-fed. Speaking generally, the weight of the body is doubled by the fifth month and trebled by the twelth. He also avers that hand-fed babies do not treble their birth rate till the second year of life, the same difference obtains in after years, so that a child four years old which was suckled by the mother (for the usual period) weighed generally two-thousand grammes more than a child who was artificially fed from birth."

If artificial food must be used, give detailed instructions as to its preparation, the care of bottles, feeding cups, etc, and the frequency of meals. Impress upon the mother the perils of hand-fed babies, and that nothing but eternal watchfulness and personal supervision on her part, will keep her baby well and strong. I hope the time will soon come when there will be no over-worked mothers, for a tired worn out woman is unfit to care for a baby. Careful instruction as to clothing, bathing and long hours of unbroken, quiet sleep, not too much coddling and showing off to admiring friends, often producing excitement precluding quiet rest for many hours. At five, the child begins his first schooling in the kindergarten. This is admirable and with suitable teachers is a useful training. I wish the same methods, viz., object teaching, broadened out somewhat could be continued through several of the lower grades. The child would escape much useless drudgery of early school years, retain his love for the school, and I believe be quite as advanced at ten years as under our present methods. Our present system, while much better in some respects than formerly, still overlooks the fact that the child's brain is the most poorly nourished of any part of the body, and is wholly unfitted for continuous application. We are trying too much to educate children from our own, rather than the child's immature condition. Parents like to see their children keep up or surpass those of their age, and so the struggle goes on, in many cases regardless

of consequences. The strongest may be able to stand the strain, but a large number of our children before they get through the high school, are nervously over-taxed. As we approach puberty, great changes take place in the physical condition of the child, clearly showing that nature is about completing the final evolution of the child into the man, and preparing him to cope in the great struggle of the human family. This final evolution of structure and function, which controls the perfection of species, is marked by a sudden and complete revolution of the female mental, as well as physical condition. How often does hysteria, insanity or tuberculosis develop at this time. How many of our young people at this period have their vital forces so overtaxed by mental work and worry that their physical organism is swept from its moorings and we see our human ship, without anchor or rudder, driven at the mercy of an uncontrolled nervous system.

Angel Money in Keating's work on Diseases of Children states "that the blood pressure in the systemic circulation is much less in children than adults; the size of the heart to that of the aorta in childhood is as 140:50 and in the adult 290:60." "Beneke has shown that at puberty the heart rapidly increases in size out of proportion with the increase in the aorta. The annual increase of the heart in size from 7 to 14 is only 8 per cent., while during the development of puberty, the rate of growth is nearly 100 per cent. He also says it is interesting to regard this growth, with corresponding increase in blood pressure, side by side with the great mental, muscular, and sexual changes. It seems clear that the remarkable increase in the activity of man's higher functions demands a more efficient circulation conducted at a higher pressure." This I believe to be a very important statement, bearing directly upon the subject of our thought. Up to this time we have observed that nature has furnished an abundance of rich nourishing blood to the tissues and organs of the body, and at a comparatively low pressure, its object being physiological growth. Now however as puberty approaches, as perfection of structure is about to be accomplished, nature must prepare for the next great step in this evolutionary process, viz., function. This it would seem can only be brought about through a more efficient circulation, under a higher pressure. So nature sets about strengthening her great central organ to meet the increased demands soon to be made upon it. To attempt to force the immature brain of a child but poorly supplied with blood, to perform the work of mature years, is like trying to make a one horse power engine do the work of a four horse power, by forced draft; you may succeed for a short time, but soon you will have a burned out shell with no power at all. G. Fielding Blanford in his Sumlian lectures, 1895, states: "I have seen disastrous effects in boys and girls, from the pressure of examinations. They fail to pass or fail to gain the prize for which they have competed. The end of all their wearisome crammings a failure! Conceive what this means to the young and developing brain and mind. Many break down in their preparation. One lad I certified who had been kept for hours daily, practicing the violin, not because he was to be a professional player, but because his father was musical and wished him to be proficient. Another, a girl broke down who had to practice an exercise a number of hours on the piano for an examination at the Academy of Music." It is worthy of remark that this pernicious system of instrument practice for hours each day, when children have all they ought to do in school, should be condemned in no unstinted terms There is something peculiarly wearing to the young in these meaningless finger exercises.

Our girls and boys as they approach puberty must be given plenty of out-door

exercise. Healthy dress reform, is being introduced; good hours for rest and sleep must be insisted upon. This running about on the streets in the evening, going to parties and the pairing off of boys and girls often results in awakening passions that do incalculable harm. Mothers should wisely prepare their daughters for the physical change that takes place at puberty, and warn them of the dangers of carelessness. If the evil effects of over-work are manifest do not hesitate to stop it at once. Don't be dissuaded by parents who, not realizing the danger, think drugs will take the place of rest. Something over a year ago a gentleman brought his son to me saying that he feared the boy had heart disease. The boy was sixteen years of age, six feet and one inch tall, and as stout as a fish-pole. He had grown up like a bean-stalk. The father complained that he could not do good work at school, could not keep up with his class, although he had always been considered a bright boy. I found his heart small and weak in its action, otherwise healthy. The only difficulty was the boy's body had outgrown his heart. I advised his giving up school for a year and put him upon a course of physical training. To-day he is all right and doing full work in school without complaint. So I might go on citing instances; it is the daily experience of us all, particularly in the cities. In this very frequency, however, lies the danger. We are too liable, when a mother brings her child to us complaining of headache and lassitude, to prescribe a tonic and one of the tar preparations. If this does not cure eye-strain must be the cause, and off to the specialist we send her. Next day she is arrayed in a modern pair of nose pinchers. I am not taking issue with the specialist, but the query often arises, would there not be less eye strain if less strain had been put on the eyes? Give the eyes and all the organs of the body a rest and we will probably save our patient from the horrors of nervous exhaustion. I am aware that this paper has brought forth nothing new, but some of us must thresh over the old straw for the few remaining kernels.

THE BATH TREATMENT IN PNEUMONIA OF YOUNG CHILDREN.*

BY THEODA WILKINS, M. D., POMONA, CAL.

We all know that to Joseph Winternitz, of Vienna, and to Thure Brand, of Stettin, belongs the honor of having rescued water, as a therapeutic agent, from empiricism, and re-instating it in scientific medicine, the former by physiological experiment, putting it upon a scientific basis, the latter demonstrating its value clinically. We also know that to the zeal and practical success of Dr. Simon Baruch, of New York, is largely due the honor of bringing it to the general attention of the profession in this country. And here I cannot but express my regret at the untimely absorption of the "Journal of Balneology" of which Dr. Baruch had become the editor.

While this recent establishment of Hydro-therapy in an honorable position in medicine, rests upon modern scientific study and research, yet, we must not forget that it is, after all, only a restoration of an old, time-honored remedy, not the invention or discovery of a new one, for hydro-therapy was intelligently used, by regular physicians, both here and in Europe before the days of Winternitz, Brand and Baruch. Dr. Hiram Corson of western Pennsylvania is often quoted in this connection, for he used it for fifty years, in a large general prac-

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tice, with ever-increasing confidence, surely a creditable record for any remedy.

There are two theories extant regarding the mode of action of cool baths in fevers, one based on speculation, the other on observation. The first ascribes whatever good effect the baths may produce, to their antipyretic action Those who hold this theory naturally consider a dose of antipyrine or phenacetine a more easily administered and convenient antipyretic, and act accordingly. The second theory ascribes the good effect of the baths to their well established power of stimulating respiration and circulation, refreshing and invigorating the nervous system, and of greatly increasing the elimination of noxious substances. Their antipyretic action is held to be of secondary importance, inseparable from them, but not the essential element upon which the good results depend. The degree of temperature may be an indicator for the necessity of the baths, as the height of the water in a gauge may determine the necessity for replenishing the boiler. But the understanding physician, in ordinary cases, does not use the bath merely to lower the temperature, scarcely more than the engineer fills the boiler merely to raise the column of water in the gauge.

In my own experience I have at times found baths very beneficial when the temperature was not 100°. Those who hold the theory ascribing to baths great stimulating and eliminative power, use them, for they know that no known medicine nor combination of medicines can produce the same results.

The bath treatment in typhoid fever, while not universally or even generally applied, has, at last become a recognized measure in therapeutics. Its value in the treatment of pneumonia is also becoming slowly accepted. Of its use in this disease Baruch writes: "Cold baths have been lauded by Yurgensen, who has, however, found few imitators of his heroic practice, viz: baths of 70°–60° with large quantities of stimulants to counteract cardiac depression. Dr Vogt, chief of the Munich military hospital, has informed me that he has found the baths, as applied in typhoid fever, of great value in pneumonia.

In the croupous pneumonia of children my experience has been sufficiently large to warrant the deduction that we possess in the cool bath (95° reduced to 80° in fifteen minutes, with friction during the entire bath) a means of aborting the disease if seen early and of hastening resolution if seen late."

But, though Baruch writes this, and other observers have corroborated his statements, the value of the cool bath in pneumonia is not yet as generally accepted as in typhoid fever, and least of all is it applied in the treatment of this disease when occuring in small children. I therefore concluded that a few cases germane to the subject might interest the society. In the first case compresses only were used. In the other two cases baths were used, beginning at a temperature of 95° and reducing to about 82° in from ten to fifteen minutes as a rule. Whenever a bath was given, three persons rubbed the child gently but firmly and continuously. For the comfort of the child sheets were "wapsed" —not folded—in the tub so as to make a comfortable bed, the head elevated a little.

Case I. George N——, aged five years. Saw him first on January 2, 1894, severe bronchitis, probably grip, with temperature of 102°. Gave laxative, a little aconite, citrate of potash and expectorants. Cold compresses over chest, changed every two or three hours. January 3, temperature 102½°, respiration more hurried, about 45, coughs more and complains of pain in right lung where there is an area, about the size of a dollar, slightly dull on percussion with fine crepitant rales. There were no facilities for bathing the boy so ice-water packs to the trunks were ordered, from arm-pits well down over the

thighs. These were changed every one to three hours or more as necessary. In addition, cloths wrung out of ice-water were applied over the right side of chest every five to fifteen minutes. In the evening all signs of pneumonia had disappeared, temperature 100½°. Twice during the next three days suspicions rales reappeared in the same spot, accompanied by a slight rise of temperture to disappear quickly after a more frequent change of compresses. In five days he was out of bed. In this case the conviction seems well founded, that an attack of pneumonia was prevented by the thorough use of the compresses, in lieu of baths. The parents, educated, intelligent people, carried the treatment out very faithfully.

Case II. May N., cousin of the preceding, aged two years. This child was at first not under my care, but was the patient of another physician one of the most careful and well-informed in the Pomona valley. This gentleman became ill himself and asked me to take the case. In describing it, he said that the previous evening there was not any pneumonia, but severe bronchitis, result of grip. Besides the usual medication, hot flaxseed poultices had been ordered every half hour over entire chest, front and back. I told him that, if I took the case, I was afraid I should want to use cold instead of heat. He seemed doubtful about the cold, at least at this stage, but, of course, desired me to follow my own judgment.

I found the child with an axillary temperature of 103½°, pulse 180, weak and irregular, respirations from 90-105 per minute. The poultices had been very faithfully applied every half hour since the last visit of the physician, besides having been used less frequently before that.

The evening before there had been no pneumonia, now the entire right lung was solidified and there were crepitant rales in the upper part of left lung; I had determined to continue the hot applications if I found the child doing reasonably well, but under the circumstances, did not feel justified in doing so. I therefore explained to the parents that I believed cool baths and cold applications offered the greatest chance for the child. They had almost given up hope and were more than anxious to make the change. A bath was quickly prepared and after giving her a little brandy, she was put into it, first wetting head and chest. During this bath, as every other that she had, she cried and moaned and begged continually to be taken out, and the fifteen minutes seemed cruel hours, but after the bath she was brighter than she had been for days; her respirations were under 80, her pulse fuller and steadier, quite regular at 160, temperature after an hour was 102½°, she took a little food willingly, looked around, smiled a wan little smile, and soon fell asleep in her warm blankets, with a hot water bottle to her feet. The directions now were to apply a cold compress around the trunk when she became warm, and inside of that a smaller one over the right lung wrung out of ice-water every five to fifteen minutes. That afternoon, about three hours after the first, another bath was given, and again three hours later, each followed by marked brightness, and improved appearance. The second and third days she had three baths each. The third day, after one of the baths, when her father was carrying her to her crib, she remarked smilingly that she had had a "nice bath" showing that a sense of well-being must have followed the bath immediately. The fourth and fifth days she had two baths each, the temperature diminishing slowly, with the other symptoms. The compresses were kept up continually, from the time she was warm after the bath until the next bath, but they were not changed as often as at first. The fifth day there was a sudden and marked improvement in the symptoms and also in the resonance of the right lung which the mother,

standing by, noticed and remarked upon. While the temperature and respiration were now down nearly to normal the heart was weak, and one bath a day, of seven minutes duration, was still found decidedly beneficial for its invigorating and stimulating effect. During the fourth and fifth day there was a little rheumatism, some swelling in the right knee and in some joints of the left hand. This seemed to yield to ichthyol ointment; it was ascribed partly to the fact that her knees were out of the water much of the time as the tub in which she had her baths was not quite long enough for her. The pain in her knee, of which she complained much, continued, however, after the swelling had apparently all gone down, and sometime after she was found to have hip joint disease of the right side, which, from symptoms that were now recalled, was believed to have existed for some months before her illness. The rapid and complete resolution of so severe a pneumonic trouble, in one already afflicted with tubercular disease, may certainly be looked upon as an exceptionally fortunate result.

Case III. A little girl aged 3 weeks. The case is interesting from its etiology as well as the extreme youth of the patient, and the number of baths given. On the first place the child had a slight cold, as the other children of the family had and a nurse in the neighborhood, "better than the doctors," had made an ointment of lard, two drops of turpentine, and "a little puddle" of laudanum, most of which had been rubbed into the child's skin, with the result that the next twenty-four hours were a struggle for life. A passive congestion with edema of the lungs followed, and lasted for two days, with temperature about normal. The pulse came up under heroic doses of strychnine and glonoin, but respirations seemed to get more shallow continually; the child appeared to be rapidly sinking. On the afternoon of the third day, acute symptoms developed a temperature of 102½°(axillary), crepitant rales in right lung, every movement seemed to cause pain. Dr. Garcelon of Pomona had seen the case with me. At this stage he suggested a bath of 95°. The bath was prepared as before, and, as in the other case, cooled to 82°; of course the baby screamed feebly and continuously while in the bath and it seemed the utmost cruelty to keep her in it for full fifteen minutes as we did. But the improvement afterward was so very marked that even the mother felt amply repaid. Indeed, the little one breathed better, nursed better, and in every way was brighter than she had been at any time since her sickness. Here as in the other case cold compresses were applied to the chest after the child had become warm. That night I stayed and superintended the treatment myself. The good effect of a bath seemed to last about two hours and a half; then temperature and pulse would rise, and the breathing again became shallow and very rapid. She would then receive a dose of strychnine and glonoin—of each about 1-120 grain—and the bath half an hour later. At the end of twenty-four hours all active symptoms had disappeared—the temperature was again down to 100° or less. Yet the baths continued necessary just as often for their vivifying and stimulating effect, though they were now reduced to ten minutes' duration.

That it was the *cool* bath and not merely the bathing and rubbing that did it was shown by slight effect produced twice by a bath in which the temperature was by mistake not lowered sufficiently. Both times the child came out of the bath very little the better for it. It was the *cold*, *i. e.*, the *cool* bath the child needed; without it all the distressing symptoms of the first few days returned. Even the mother desired their continuance, although the baby screamed all the time during a bath. She also found that a bath of seven minutes duration was not as beneficial in its results as one of ten minutes. The interval between

the baths was gradually lengthened; the last bath was given on the ninth day, she having had in all thirty-two baths.

During the periods of depression I found great benefit from the inhalation of aromatic spirit of ammonia. In this case I had quite exceptionally faithful and intelligent assistants in the baby's mother and aunt. To their careful attention to details and earnest co-operation much of the good results obtained is to be attributed. The child is now at the age of six months, "the stoutest and healthiest we have ever had," they tell me.

While a few cases like the above give no conclusive evidence in any direction, still, as far as they go they corroborate Dr. Baruch's words: "We possess in the cool bath—95°, reduced to 80° in fifteen minutes, with friction during the entire bath—a means of aborting the disease if seen early, and of hastening resolution if seen late."

ERGOT'S PLACE TODAY IN OBSTETRICS.*

BY ANNE W. NIXON, M. L. M. D., LOS ANGELES, CAL.

In the advance of science along the line of Surgery and Medicine, during the last three, and especially the very last decade, there has been no more radical change than in the concensus of opinion with regard to the administration of ergot of rye, in the prolonged second stage of labor, when the inertia is due, simply, to lack of expulsive pains.

This condition is not born of a higher civilization, and is not one of the many assessments levied upon a class, weakened by luxurious habits of life, for we find the aborigines of our own land with those in the jungles of darkest Africa, and among the native Mexican population, meeting the same condition, by efforts to unquestionably assist nature, "in expressio fetus." Again the crooning "Mammy" of the mountains of the South, fills a quill with snuff from her ever-ready pouch to startle the enervated system by a sneeze into its final expulsive force.

The attention of the profession was first directed to ergot, as a drug to excite uterine contractions, and to restrain uterine hemorrhage, by Dr. Stearns, an American physician, in 1814; and ten years later it was employed in England. Thirty years ago every practitioner used ergot, every text book gave ample space to its administration and usefulness, though always bearing the label of *danger* to the child and often to the mother as well.

The differences of opinion as to the action of ergot and ergotin upon the uterine muscular fibers are many and are of some theoretical interest. That the muscular contractions are intensified in force, frequency and duration until finally a tetanic condition ensues, has been definitely determined. Kohler attributes its ecbolic properties to the increased irritability of the peripheral nerves, with an attendant anemia of the spinal cord. Wernich maintains that the irritation of the uterine nervous centers, is induced by the anemia of the spinal cord, and uterine tissues. This anemia is referred to loss of tonicity in and dilation of the veins whereby venous congestion, leading to secondary arterial anemia is produced. Other observers assume a contraction of the capillaries and increased arterial pressure as the source of the anemic irritation of the nerve centers. Benicke insists that direct stimulation of the uterine muscular fibers by the ergot is the cause of their exaggerated contractility.

These facts concerning its operation, will most certainly decide the

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accoucheur, that, given in the first stage of labor, its tendency is to supplant the normal rhythmical contractions of the uterus, with tonic and tetanic contractions, thereby preventing the further dilatation of the os uteri. By the constriction of the uterine vessels, or by pressure upon the umbilical cord in these energetic contractions, the life of the child is imperiled by depriving it of its blood supply. Byford states that in his experience, several cases of still-born children could be directly traced to the use of ergot. The evil effects upon the maternal tissues, from the unyielding rigid contractions, may result in rupture of the uterus or its effect, being far beyond control, lacerations of vagina and perineum may occur.

Ergot should have no place in the second stage of labor, when there is the slightest obstacle to immediate delivery, or when the fetal head is high in the pelvic canal.

Benicke reported twenty-seven cases in which ergot was administered during the second stage of labor on account of inertia and in seven cases only, was there spontaneous delivery.

Ergot administered during the third stage may cause an extreme retraction of the uterus. The placenta still being "in situ," complete retraction does not take place in the body of the uterus, but the muscular fibers of the lower segment becoming shortened, a constriction takes place which gives to the uterus the peculiar shape and the condition known as an "hour glass," contraction with imprisonment of the placenta. This action of the drug may continue from thirty minutes to one hour and a half.

To what extent the process of involution of the uterus is disturbed by the administration of ergot we are indebted to the experiments of Emile Blanc on one-hundred cases. In forty cases no ergot was given, in forty cases it was given for five days and in twelve cases it was given for ten days following labor. Ergotine was administered subcutaneously in the abdominal wall. The labors were normal and the cases were all at term. The results of these experiments proved that: Administered during the first five or ten days after delivery ergot exerts no favorable influence but rather *interferes* with the process.

Other experiments were made by Herman and Fowler on two sets of patients. The first set were given ergot for two weeks after labor; the second set received but a single dose after the completion of labor. In those cases treated by the continuous administration of ergot the uterus diminished more rapidly in size than in those cases in which only one dose was administered. No effect in either case upon the lochia.

Dr. Dakin's experiments resulted in retarding the process of involution and shortening the stage of lochial discharge. The frequency, intensity and duration of after-pains were found to be decidedly diminished by its use.

Among obstetricians to-day, the sentiment seems to be universal that the disuse of ergot in any stage until the uterus is emptied of its contents, fetus, placenta and clots is scientific gain, but that at completion of labor the drug may at times, prove invaluable by occluding the orifices of the bleeding vessels and thereby averting a threatened post-partum hemorrhage. In this consideration we shall be led to ask: *Has ergot any place to-day in obstetrics?*

The Colonial.

The preliminary program of the Ninth Annual Meeting of the American Orthopedic Association, to be held at Chicago, Sept. 17, 18 and 19, promises a goodly number of papers of great interest.

A CASE OF COMPLETE UTERINE INERTIA.

BY J. LEE HAGADORN, M. D., FULLERTON, CAL.

I was recently called to attend a woman in her ninth labor. She was forty years of age, having been married at fourteen, her first confinement having taken place at fifteen. Her labors had been short, comparatively easy, and unattended with any particulars of interest. She had had a number of miscarriages. Her health, previous to this confinement, had been exceedingly poor, and the most of the three months previous had been passed in bed.

I saw her at 11 a. m. and she had been in labor three hours. The pains had been only what she styled "misery in the back." Upon examination per vaginam, I found the cervix soft and dilated to the size of a silver dollar. By palpation I discovered that the uterus was exceedingly flabby and greatly distended by an enormous amount of amniotic fluid. The presentation was L. O. A. and the head low. As time passed, the pains (if they could be dignified by the name of pains) assumed a peculiar character. Only a few fleeting contractions of the circular fibres near the fundus were apparent. At times I could discover, by pressing down upon the uterus, that an irregular, serpent like contraction of a few longitudinal fibres would occur, but aside from this and an occasional hardening of the uterus, no real labor pains could be appreciated.

The bisulphate of quinine was given in heroic doses without effect. Warm vaginal douches, hot drinks, hot bottles, kneading the uterus, walking the patient about, and, in fact almost everything that had ever been recommended, was resorted to in vain. When the patient became exhausted, chloral gave her rest and sleep. Thirty hours passed and no pains. The cervix had dilated to its full extent, but the retractile power of the uterus drew the head high into the pelvic cavity again and again. The amniotic sac was ruptured and an attempt made to bring down the head by manipulation per rectum, but without success.

The husband had hitherto stoutly opposed the application of forceps, but at last reluctantly consented. The patient was put on a kitchen table and everything made ready. I had eight ounces of chloroform with me, but, though I gave it carefully, it produced scarcely any effect whatever upon the patient. The only assistants I had were a neighbor lady and the husband, who were by this time so badly frightened that they were of little help. We were seven miles from other medical aid. I determined to put on the forceps without anesthesia, and, although the patient struggled violently and the head was high up, I succeeded in bringing it down to the pelvic outlet. At this juncture the patient and those present forbade any further attempts, and I was compelled to desist. The child could be distinctly heard crying *in utero*. The patient was nearly completely exhausted. Things were ripe for a rupture of the uterus. In despair I injected $\frac{1}{25}$ grain of strychnia, and grasped the fundus with both hands. In four minutes three tremendous bearing down pains came, and without further trouble a twelve pound boy was delivered. The placenta was extracted by the method of Credé, and little hemorrhage followed. Singularly enough, the child has as yet shown no signs of inspiration pneumonia.

I had never heard nor read in any work, that strychnia acted favorably in uterine inertia but certain it is, that strychnia brought on pains in this instance when they were despaired of.

SELECTED.

DEPARTMENT OF SURGERY.

UNDER THE CHARGE OF JOS. KURTZ, M.D., PROFESSOR OF CLINICAL SURGERY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA, AND CARL KURTZ, M.D.

CASES OF CEREBRAL SURGERY. (*Times and Register.*)—At the last meeting of the Medical Society of Victoria ten cases of cerebral surgery were shown. The first was a patient, aged 30, under the care of Mr. G. A. Syme. When first seen in August, 1893, the symptoms were epileptiform, convulsions beginning in the right side of the face, spreading to the right arm and leg, and then becoming general. They were preceded by a sense of constriction in the throat and a numb feeling in the tongue and right side of the face. For some days after the attack the right side of the face and the tongue were paralyzed, and the speech thick. Vision, visual fields, and optic discs were normal. There was no vomiting, and no loss of sensation. There was no personal or family history of tubercle, and no history or evidence of syphilis. It was concluded that there was some irritation of the cerebral cortex over the the face and tongue centres, probably a tumor, and operation was advised, but not agreed to until October 22, 1894, when the patient had become much worse, suffering from aphasia and agraphia, paralysis of the right side of the face and tongue, and paresis of the right hand. The fits had become more frequent and more severe, and he had pain in the left parietal region. The skull was trephined over the face and tongue centre, and a tumor 2.3 by 1.9 inches in size and two ounces and a half in weight removed. It grew from the dura mater and pressed on the lower portion of the ascending frontal convolution and the posterior part of the second and third frontal convolutions. The tumor was encapsuled and microscopically was a small round-celled sarcoma. Speech and motion were gradually recovered, and when shown nearly four months ofter operation the paresis of the face and tongue was haraly noticeable, the speech was good, he could write perfectly, had no pain and had had no fits. There was no evidence of recurrence. The second case was under the care of Dr. W. Moore. The patient, aged 9, was suddenly seized with a convulsion, and became unconscious, with right hemiplegia. She had suffered from a discharge from the left ear for several years, which became worse, with earache and pain on the left side of the head ten days previously. The temperature was 102.6 degrees F. A diagnosis of temporo-sphenoidal abscess was made, and the skull trephined in the usual way. The brain was explored in several directions with a grooved director and a trocar und cannula, but no pus was found. After the operation the temperature became subnormal, and the pulse 60. The paralysis and aphasia remained. Five days afterwards the wound was reopened and the brain again explored, when pus to the extent of about two ounces was evacuated from the temporo-sphenoidal lobe. The abscess was drained, the patient gradually improved, regaining speech and power in the leg, but the arm remained weak, with some contraction of the fingers.

THE TREATMENT OF PLEURITIC EFFUSIONS.—(*Meaical Times and Circular.*) When paracentesis thoracis by aspiration was first introduced, antiseptic surgery was unknown, and it is, therefore, no matter for surprise that a method which gave such brilliant results as compared with the methods then in vogue for the relief of recurrent effusions should have forthwith attained a con-

siderable measure of popularity. Although from an antiseptic point of view aspiration constituted an immense improvement on alternative procedures, it was soon found that in the hands of careless surgeons the conversion of a simple serous into a purulent effusion not infrequently followed repeated paracentesis, and so it gradually came to pass that a rule was formulated—a rule which still maintains its ground in the current text books—in virtue whereof paracentesis was disadvised in the event of the effusion recurring after two or three aspirations. During the last few years, however, considerable advances have been made in this department of surgery, and it is now formally admitted that the conversion of a simple pleuritic effusion into an empyema is a fault of the operator. The fact that it has been found possible to empty the chest by means of the aspirator as many as thirty-seven times without inducing any such change may be taken as evidence that, with ordinary precautions, no risk of sepsis need be incurred. It follows as a logical sequence that it can never be justifiable to open the chest in such cases so long as the effusion preserves its serous character. At the last meeting of the Medical Society of London Dr. S. West related a case in which, after performing paracentesis thirty-seven times in a case of recurring pleuritic effusion, he felt compelled, by the inability of the patient's friends to incur the expense of any further prolongation of the treatment in town, to consent, though with grave misgivings, to the chest being opened. The result fully justified his misgivings, for the patient, though she ultimately made a good recovery, passed through a very critical period, during which her life was in the balance. In criticising such a case one is tempted to remark that the reason assigned for consenting to an operation which was recognized to be fraught with the gravest risk to the patient was hardly one that would commend itself to the average reader. Paracentesis is such a simple operation that it is not easy to conceive of any valid reason why this method should not have been persisted in, even though it might have had to be performed by the country practitioner who originally had charge of the case. The fact remains that, although the patient survived the ordeal, the history of the case reinforces the moral that opening the chest under such circumstances is an utterly unjustifiable operation.

OBSTETRICS AND GYNECOLOGY.

UNDER THE CHARGE OF WALTER LINDLEY, M.D., PROFESSOR OF GYNECOLOGY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA.

SEQUELAE OF SYMPHYSEOTOMY.—Tissier (*Archives de Tocologie et de Gynecologie*,) exhibited recently at a French society a woman upon whom he had performed symphyseotomy six weeks previously. She was a multipara and rachitic. The conjugate was about three inches. Her previous labors had been severe. Labor was induced by Tarnier's bags and the forceps applied three times without result. Symphyseotomy was then performed. The hemorrhage was free. When the pubic bones parted a prolapse of the pelvic organs was distinctly observed. Delivery was accomplished with ease. There was troublesome tympanites about the third day. By the seventeenth day the symphysis was not consolidated and the pubic bones still slid on each other a little, consequently the patient could not walk long without feeling fatigued. A thrombus developed around the levator ani on each side during the puerperium, but both became absorbed. The child died when a few weeks old. The

question as to the cause of the tympanites was raised at the society. Tissier believed it to be due to the prolapse of the uterus, which intercepted the free descent of the flatus. Fournel believed it to be due to temporary intestinal paralysis, as is frequent after abdominal section.—*Medical and Surgical Reporter.*

CYSTITIS.—John C. Hersler (*Univ. Med. Mag.*) the chief indications for treatment are:

1. To remove any discoverable sources of irritation which act through the medium of the urine. This may be effected by a milk diet, and a discontinuance of the use of acid, pepper, etc. Any mechanical source of vesical irritation should receive appropriate treatment.

2. The urine should be rendered bland by the use of milk diet, the ingestion of considerable quantities of water, the administration of potassium citrate, if the urine be too acid, or of boric acid if it be alkaline.

3. Pelvic congestion should be relieved by hot vaginal douches, placing the patient in the knee-chest position; and the correction of constipation.

4. The inflamed cystic mucous membrane may be relieved by the administration of boric acid, salol, ol. santal, copaiba, or creosote by mouth; or the use of injections of boric acid, carbolic acid, or nitrate of silver in suitable strengths.

5. The patient's general health should be improved by tonics, etc.

6. Rest in bed, especially in all acute cases, is absolutely imperative.

While advocating direct local treatment for cases of cystitis which do not readily respond to ordinary therapeutic measures, the writer advises that it should be employed with judgment and caution.

RIGID OS.—At a meeting of the Obstetrical Society of London, Dr. Farrar (Gainsborough) gave the details of two cases in which he had used a 10 per cent solution of cocaine as an application to the rigid os. In one case he had applied the cocaine after endeavoring vainly to relax the cervix by means of chloral, bromide of potassium and morphia, and the most persistent attempts at digital and mechanical dilatation, with and without chloroform. He decided upon incising the os, and used the cocaine to this end. After five minutes he introduced the finger as a guide to the scissors, and, to his surprise, found the os widely dilated. In the second case, a primipara, forty-eight years of age, he used every effort, as before, to produce relaxation, and waited three days before making the application of cocaine, which was immediately successful. In four minutes the os had yielded. He considered the dilatation to be due to the cocaine in both cases. Dr. Armand Routh said that Dr. Dibbs, of Shankin, had recommended cocaine as relieving the pains of the first stage of labor, and that Mr. Head Moore advised cocaine and boric acid pessaries in cases of rigid os. He himself had found it useful. The president, Dr. G. E. Herman, said that two cases were rather a slender foundation upon which to base a conclusion, but if Dr. Farrar's results were confirmed by further experience, he would have made a valuable addition to our obstetric resources.—*The Lancet.*

VOMITING OF PREGNANCY.—At the recent meeting of the Colorado Medical Society (*Journal American Medical Association*) Dr. McHugh recommended the use of the stomach tube for diagnosis and treatment in vomiting of pregnancy.

Dr. Sol. G. Kahn in diseases of uterus recommended curettage and ichthyol tampons.

Dr. Stoddard said that fourteen women die of peritonitis to one man.

EYE, EAR, NOSE AND THROAT.

UNDER THE DIRECTION OF W. D. BABCOCK, A.M., M.D., PROFESSOR OF DISEASES OF THE NOSE AND THROAT, COLLEGE OF MEDICINE OF THE UNIVERSITY OF SOUTHERN CALIFORNIA.

INDUCTION OF LABOR IN ALBUMINURIC RETINITIS. (B. M. J., June 1895.)—Snell, in an article on this subject, says:

1. For retinitis appearing before or about the sixth month, induction of labor should be recommended.

2. When it shows itself only in the last few weeks it may often be unnecessary, but that each case must be judged by the severity of the affection.

3. That a case in which retinitis has shown itself in one pregnancy should be carefully watched, both as to the presence of albumen in the urine and as to the eye affection and treatment adopted accordingly.

PURULENT OPHTHALMIA AND ITS TREATMENT.—Scott (*Oph. Record*, June, 1895.) claims by the use of a wash of

Hydrastin Sulph	gr 5
Acidi Boraci	gr 5
Sodi Biborat	gr 5
Tinct Opii deod	drachm ss
Aquae	oz 1

injected well under the lids four to six times a day, with washing out the eye with hot water, and the application of Nitrate of Silver five grain solution to the everted lids, every case of purulent ophthalmia can be aborted in from three to five days if seen at the very start. He uses the ice compresses also. He further declares that in his opinion if a drop of this solution is used three or four times daily for the first three or four days after infection there will be no more cases of purulent ophthalmia.

PURULENT OPHTHALMIA; USE OF PERMANGANATE OF POTASH.—Vian (*Annis de O.*, May, 1895.) uses a concentrated solution of Permanganate of Potash in this trouble. He applies daily with a brush a 10 per cent. solution of the permanganate and bathes the eyes with a 1–2000 solution.

SYPHILITIC OCULAR MANIFESTATIONS AND THEIR TREATMENT.—Abadie (*Annal de Ocl.*, May, 1895.) They are choroidal, retinal and optic nerve troubles. They are of rapid development and if left to themselves or not properly treated, lead in a short time to irreparable loss of vision. They appear usually late, from ten, fifteen to twenty years after the initial lesion in patients *who have had to that time insignificant or no complications and who have not undergone prolonged mercurial treatment.* Mercury must be given subcutaneously and in severe cases intravenously.

DISEASES OF THE EYE IN RELATION TO DISEASES OF THE AIR PASSAGES.—Dr. Carpenter, (*Oph. Record*, Sept., 1894.) Phylyctenular conjunctivitis and keratitis are largely dependent upon a present or preexisting rhinitis. Megrim, ciliary neuralgia, asthenopia, passive congestions and inflammations and reflex irritations of the eye are often cured only by treating the disease in the upper air passages upon which they depend. Treating the eye alone or correcting the error of refraction, only partially curing or relieving some of the prominent symptoms, finally treating the nasal chambers effects a cure.

NOTE.—Dr. Dunn of Richmond, Va., called attention to the presence of Luschka's tonsil in almost every case of Phylctenulae.

DEPARTMENT OF MEDICINE.

UNDER THE CHARGE OF DRS. F. D. AND ROSE T. BULLARD.

GOITRE TREATED BY DESICCATED THYROIDS.—(*Editorial, Journal American Medical Association.*) Dr. E. Fletcher Ingals reaches following conclusions after analysis of fifty cases treated by himself and others:

Thyroid products produce marked physiologic effects upon the nervous and circulatory systems, as indicated by headache, dizziness, pains in various portions of the body and great weakness. If the administration of the remedy in doses that cause such symptoms is continued for a few days, constitutional effects are produced indicating that persistent use of doses of from 6 to 12 grs. of the dried thyroid (equal to one or two thyroid glands) three times daily, might produce fatal results.

Desiccated thyroids appear quite as active and more stable than the liquid extract; and internal as effective as hypodermatic administration. Internally, the adult dose should not exceed 2 grs, t. i. d, at first; it may be increased to two or three times this quantity if it cause no unpleasant symptoms.

In myxedema, it benefits quite a large percentage, the best results probably being obtained by giving it at intervals for a long time. In exophthalmic goitre it causes rapid reduction in the size of the gland, but has little or no effect on the exophthalmos and apparently aggravates the heart symptoms; it must therefore be carefully watched.

In many cases of goitre, internal use of full doses is followed by a most remarkable diminution in size of the diseased gland. Improvement or cure may confidently be expected in 76 per cent. of the cases, but sufficient time has not yet elapsed to show what the final results will be. It would probably not influence cystic growths of the thyroid gland, but its effect in diminishing the size of very firm and hard enlargements would justify experimentation in other directions.

RATIONAL THERAPEUTICS IN CHOLERA INFANTUM.—(*N. Y. Medical Journal.*) By Dr. Gustavus Blech, St. Louis: First, remove if possible, the disturbing causes; second, treat symptoms which *per se* endanger the life of the patient; and third, sustain vitality. In cholera infantum, one thing is sure, there is chemical decomposition of foods, causing an inflammatory condition of the digestive and alimentary canal.

As soon as called to a case, prohibit for the first day any food whatever-including the mother's milk. Instructions must be very strict in this direction for mothers are often inclined to quiet babies by putting them to the breast. Remedies are of little value, beginning with calomel, salol, and the newer antiseptics, all have proved a failure for they do not act quickly enough. Since the adoption of the following mode of treatment, I have met with remarkable success and no honest practitioner should refuse it a trial.

I add a teaspoonful of hydrozone to a pint of water for washing out the stomach. The vomiting ceases after the first washing, as a rule. If necessary, this procedure can be repeated. If the vital power of the little patient is not too low it can produce no harm. But in every case, no matter how far advanced I do not omit an irrigation of the bowels, for which purpose I use a soft rubber catheter attached to a common bulb-syringe. The catheter is introduced as high in the colon as possible. It is unnecessary to say that the water must first be sterilized. I use cold water, and add to each quart about two ounces of hydrozone. The improvement after the first or second irrigation is marked. If necessary, these irrigations can be repeated every two hours Among other reme-

dies there are only two to be employed, morphine and strychnine. Both ought to be administered hypodermically. Their indication is too well known and they are about all we need. No antipyretics should be given. If the fever is very high and if the irrigation of the bowels does not reduce it, the whole body should be washed with alcohol, The diet for the next twenty-four hours should be very light indeed. Sweet, strong Russian tea is all I allow. Each individual case will teach us when food can be allowed again.

NERVOUS AND MENTAL DISEASES.

UNDER THE CHARGE OF H. G. BRAINERD, A.B., M.D., PROFESSOR OF MENTAL AND NERVOUS DISEASES, COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA.

THE KNEE-JERK IN DIAGNOSIS. (*New York Medical Journal.*) By Dr. W. M. Leszynsky.—While confining my remarks to this particular symptom, let me state at the outset that the presence, exaggeration, or absence of the knee-jerk in itself is not sufficient for a diagnosis without corroborative signs. In other words, its exaggeration or absence *per se* is not pathognomonic of any special type of disease.

The absence of the knee-jerk is of more positive value than its exaggeration. Any interruption or interference with the integrity of the reflex arc will abolish it. The obstruction may be either in the sensory or motor portion.

1. Thus, a lesion which involves the posterior roots of the posterior columns in the region of the second, third or fourth lumbar segments, such as tabes or transverse myelitis, produces a break in the sensory path, and the knee-jerk is abolished. These are the only lesions in the sensory tract of the cord that are known to cause a loss of the knee-jerk.

2. A lesion involving the *motor* portion of the reflex arc, such as acute or chronic anterior poliomyelitis, or multiple or isolated peripheral neuritis affecting the anterior crural nerves, will also abolish the knee-jerk.

The perplexing question naturally arises, By what method are we to determine the cause of the loss of the knee-jerk in an individual case? Excluding the very remote possibility of its being a physiological anomaly, we interpret its significance only after a careful study of its association with other symptoms. I have tested for the knee-jerk nearly one thousand children over three years of age, and found it present in every case. In fifteen its presence was somewhat doubtful at first, but was ultimately demonstrable.

1. *Loss of the knee-jerk associated with* severe, sharp, circumscribed, paroxysmal pains in the lower extremities; incontinence or slowness in emptying the bladder, with preservation of muscular resistance, with or without inco-ordination, with or without objective sensory symptoms, is indicative of organic changes in the lumbar segments of the cord, such as tabetic degeneration or a lesion of their posterior nerve roots.

2. *Loss of the knee-jerk associated with* diminished muscular resistance or evident paresis or paralysis in the lower extremities, pain in the course of nerve trunks with tenderness on pressure, some atrophy and quantitative decrease in faradic irritability, with or without objective sensory disturbances, and the absence of bladder symptoms, is a clinical picture of multiple neuritis.

3. *Loss of the knee-jerk* with flaccid paralysis, atrophy, and loss of faradic reaction in the quadriceps, and the absence of all sensory symptoms, indicates a poliomyelitis in the lumbar portion of the cord upon the same side.

Now, do not let us assume that the knee-jerk is completely absent in all cases of tabes. In some, the degeneration may begin in the cervico-dorsal portion of the cord, and, while symptoms such as ataxia, fulgurating pains, anæsthesia, and paræsthesia are limited to the upper extremities, the knee-jerks may remain well marked until later in the disease, when the pathological process attacks the lumbar cord. I have seen a number of cases of tabes where the absent knee-jerk was unilateral. In one instance the patient was a man fifty years of age, who suffered extremely from the frequent and severe paroxysms of pain. He was under my observation nearly six years, but the knee-jerk persisted on one side. He died suddenly of cerebral hæmorrhage. No autopsy was obtained. The knee-jerk has been known to reappear in tabetics during alcoholic intoxication, and upon the same side after a hemiplegia from cerebral hæmorrhage. This phenomenon can only be explained on the assumption that the sensory fibres which have remained intact regain their conductivity when released from the inhibitory cerebral influence. As a general rule the knee-jerk does not disappear so long as there exist in the reflex paths a certain number of healthy muscle and nerve elements. Therefore, in certain forms of myelitis, neuritis, or myositis, and in the various muscle atrophies of spinal or peripheral origin, the knee-jerk may persist for a long time, although the efficiency of the muscle is considerably diminished. On the other hand, in all lesions which affect the nerves in their totality, such as atrophy of the greater part of the nerve or muscle fibres, the knee-jerk is abolished.

SYPHILIS OF THE BRAIN.—(*N. Y. Medical Journal.*) By Dr. Leo Stieglitz. In conclusion, I should like to say a few words about the general diagnosis, prognosis, and treatment of syphilis of the brain. It has been my experience that the disease in its early stages is most frequently confounded with the functional neuroses, neurasthenia, hysteria and epilepsy; this is due to the transitory character of many of the focal symptoms and the frequent presence of such neurasthenic symptoms as insomnia, general irritability, and headache. I should like to offer the following list of symptoms which should arouse suspicion of syphilis of the brain in a physician's mind; they are *especially suspicious if they occur in irregular combinations:*

1. Persistent headache, which may be worse toward evening or at night, and is often associated with insomnia and general irritability.
2. Pupillary changes: inequality of the pupils (when not congenital), myosis, mydriasis, the Argyll-Robertson pupil, the loss of response to light and accommodation.
3. Ocular nerve palsies.
4. Irregular bilateral cranial nerve palsies.
5. Hemianopsia, optic neuritis, especially hemianopsia bitemporalis fugax (Oppenheim).
6. Focal epileptiform discharges, motor and sensory, occurring without history of injury.
7. Epilepsy developing after the age of twenty-five (excluding injury, alcoholism, lead, and uræmia).
8. Temporary monoplegias.
9. Temporary aphasia in any form,
10. Apoplexy before the age of fifty (excluding lead, cardiac and renal disease.)
11. Polydipsia and polyuria.
12. The tendency of the symptoms present to improve spontaneously and then relapse.

The prognosis of the disease varies with the special character of the morbid process present in a given case; if brain tissue has been destroyed by acute softening following thrombosis or a hæmorrhage, or by the encroachment of a gumma, no amount of mercury will restore the tissue destroyed. In general, it may be said that the earlier the disease is properly treated the better the prognosis; there are few diseases in which prompt and efficient treatment is of such essential importance as brain syphilis. In considering the prognosis it must always be remembered that relapses are liable to occur, as is the case in other manifestations of the disease. It is therefore always well to subject the patients to a prolonged course of specific treatment even after all symptoms have disappeared, and to be alive to the very first signs of a recurrence.

Concerning the treatment itself, two points must be emphasised. In the first place, unless a special contra-indication exists it is best to combine mercurial inunctions (three to five grammes) with the administration of iodide of potassium or sodium in doses of three hundred to four hundred grains a day, which are very well borne by most patients; in fact, the large doses often create less disturbance than small ones, according to my experience. In the second place, if syphilis of the brain is suspected in a given case and a tentative course of specific treatment is decided upon, the latter must not consist in the administration of small doses of iodide of potassium. I have seen cases of brain syphilis get worse under fifty grains of iodide of potassium a day and respond promply to treatment as soon as mercurial inunctions and three hundred grains of iodide of potassium a day were ordered In such a case, therefore, the tentative treatment should be just as vigorous as though the diagnosis of syphilis were well established; if no improvement at all occurs within four weeks, none is liable to occur from further specific treatment.

CORRESPONDENCE.

LICENTIATES OF THE CALIFORNIA STATE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners of the Medical Society of the State of California, held June 4, 1895, the following certificates were granted:

ARCHIBALD, O. WELLINGTON, 4051, Jamestown, N. D., College Physicians and Surgeons, Keokuk, Iowa, February 23, 1870.
BACON, JOHN W., 4052 Los Angeles, Rush Medical College, Ill., February 5, 1869.
BURKE, WE LINGTON C. 4053, Los Angeles, Univ. Medical College Kansas City, Mo., March 22, 1892.
CALHOUN, BRUCE L., 4054, Verona, Pa., Cincinnati College Medicine and Surgery, O., June 6, 1876.
COX, H. M., 4055, Redondo Beach, Coll. Physicians and Surgeons,, Keokuk, Ia.. February 17, 1876.
DELUCIS, ANDREA, 4056, San Francisco, Royal University, Turin, Italy, December 7, 1881.
DILLS, THOMAS J., 4057, Ontario. Medical Dept. University of Michigan, March 29, 1870.
LAKE EDWARD H., 4058 Alameda, St. Louis College Physicians and Surgeons, Mo., March 26, 1895.
LOOFBOURROW, THADDEUS L , 4059, Eureka, Rush Medical College. Ill., March 25, 1890.
MILLICAN, KENNETH WILLIAM, 4060, Los Angeles, Royal College of Surgery, England, November 19, 1879; Royal College of Physicians, Edinburgh, Scotland, July 7, 1880.
O'BRIEN, THOS. J. PIERCE, 4061, Los Angeles, McGill University, Montreal, Canada, March, 31, 1882.
PERRAULT EDWARD L., 4062, San Francisco, Medical Dept. Univ. California, November 10, 1885.
PHILIP, JOHN H., 4063, Oakland, Bellevue Hospital Medical College N Y., March 25, 1895.
SCHIFF, G., 4064, San Francisco, University of Wurzburg Germany, January 26, 1856.
VARY, GEORGE M. P., 4065, San Francisco, St. Louis College Physicians and Surgeons, Mo., March 26, 1895.
VOORHEES, SHERMAN, 4066, Dagget, Pa., College Physicians and Surgeons, Baltimore, Md., April 21, 1893.
WILSON, GEORGE B., 4067, Pullman. Washington Cooper Medical College, Cal., December 6, 1892.
WOODRUFF, EDWARD H., 4068, Los Gatos, McGill University, Montreal, Canada, April 1, 1890.

REFUSED:

DORA W. T. KREMSER, San Bernardino, Insufficient Credentials.
JULY 2, 1895.

BALABANOFF, CHRISTO PETROFF, 4069, Tacoma, Wash., Medical Department University City of NewYork, New York. March 6, 1888
DUBOIS, J. K., 4070, San Francisco, St. Louis Medical College, Mo., March 12, 1875.
FISHER, J. C. 4071, Garvanza, Medical College of Indiana, February 24, 1884.
FREEMAN, WILLIAM, 4072, San Diego, Medical College of Indiana, Febru ry 28, 1877.
GOODMAN, EMANUEL, 4073, San Francisco, Medical College of Ohio, April 7 1892.
GRUNIG, LOUIS H., 4074, Winters, Hospital College of Medicine, Kentucky, June 18. 1895.
HAVILAND, AGNES, 4075, Oakland, Ensworth Medical College, Mo., March 31, 1893.
HAVILAND, CLARENCE M., 4076, Los Angeles, College of Medicine University Southern California, June 1, 1894.
JANSS, PETER, 4077, Los Angeles, Bellevue Hospital Medical College, N. Y. March 9, 1885.
KELLEY, E. A., 4078, Oakland, Medical College of Ohio, February 27, 1878.
LAZALERE, JOHN V., 4079, Chula Vista, Medical Department University Buffalo, N. Y., February 26, 1884.
LOWENTROUT, OSCAR B , 4080, Riverside, Jefferson Medical College, Pa., May 15, 1895.
MCNEEL. FRANK H., 4081, Santa Rosa, Rush Medical College, Ill., February 22, 1881.
NELSON, CHARLES ROBERT, 4082, Auburn, Western Univ. of Pennsylvania, March 21, 1895.
NEWTON, FRANCES L , 4083, Woodland. Woman's Medical College of Pennsylvania, May 8. 1895.
SCOTT, EDWARD A., 4084, Coronado, College of Physicians and Surgeons New York, June 10, 1891.
SMITH, FRANKLIN, 4085, San Francisco, Medical Dept. University City of New York. March 3, 1865.
WINSLOW, CHAS. E., 4086, Los Angeles, Rush Medical College Ill., February 21, 1882.
YOAKUM, F. E., 4087, Garvanza, Hospital College of Medicine, Kentucky, June 16, 1885.

REFUSED:

EMMA W. STEVER, Florence, Cal; Insufficient credentials.

CHAS. C. WADSWORTH, M. D., Secretary.

SUNSHINE IN CALIFORNIA.

The weather bureau makes record of all meteorologic phenomena, among which is the record of the number of hours and minutes each day that the sun shone. This record is made by a photographic process or by an electrical register; each possesses merit, and both give very accurate results. Records of sunshine have been made at San Francisco since April, 1890, and a record has also been made at San Diego. At other Western Bureau offices in California no sunshine record has been made. However as a record of the clear, partly cloudy and cloudy days has been made at all stations in California as elsewhere, the approximate amount of sunshine can be ascertained for all places in California in conjunction with the absolute sunshine record now made. This paper is for the purpose of disseminating such information concerning the record of sunshine in California as the Weather Bureau has so far collated. The rays of the sun are the life-giving properties to all living things. The existence of ourselves, our health, the germination, growth and development of all vegetation is dependent upon sunshine. The presence or absence of sunshine regulates, to a very great degree, the condition of the invalid and controls the actions of the healthy. Especially is sunshine of value to the people of California in their vineyards and fruit drying. It is true that an excess of sunshine makes a country arid, a deficiency makes a country humid, but favored indeed is the country of a medium between these extremes. The records of San Francisco show that it enjoys on an average 58 per cent. of the possible sunshine; that the month of June has the greatest amount of sunshine when the per centum of the possible amount is 70 and that December has the least with 43 per centum. The amount of sunshine at San Francisco, 43 per cent., is however 1 per cent. more than the average amount of sunshine that occured at Cleveland, Ohio, during the year of 1893. The average amount of sunshine at San Francisco in the various months of the year, based on the past five years' record is in per cent. of the possible:

January.....52	April.....63	July 69	October.....64
February....52	May 59	August.....57	November.....57
arch 52	June 70	September....61	December..... 43

The average annual being 58 it is seen that from April to November inclusive there is more than the average sunshine and less than the average from December to March inclusive; these latter months are practically the months of the rainy season, yet the average sunshine for these rainy months is 50 per cent. and this average is more than the average annual sunshine over the New England and Middle States and over Kentucky, Ohio, Indiana and the region of the Great Lakes, or more in San Francisco during the period of least sunshine, than prevails on an average throughout the year over that portion of the United States where the population is the densest. It should be remembered that San Francisco is on the immediate coast, and that naturally more cloudy or foggy weather will there prevail than at places farther removed, hence a greater amount of sunshine prevails in the interior.

At San Diego there was 68 per cent. of the possible sunshine during 1893, figures taken from the latest report of the Chief of Weather Bureau. This report shows that August had 76 per cent. of possible sunshine, April and October 75 per cent., July 73 per cent., November 71 per cent., February 70 per cent., September 69 per cent., January, May and December 66 per cent., June 61 per cent. and March 56 per cent., or that at San Diego, the least amount of sunshine in any month is in March when 56 per cent. of the possible prevails, and this is a larger amount of sunshine than the average annual amount which

prevails over all that portion of the United States east of the Mississippi river and north of a line drawn on the latitude of Omaha. On an average throughout the year 80 per centum or more of the possible sunshine prevails at San Diego from 11 a. m. to 5 p. m. At San Francisco from 70 to 78 per cent. of the possible sunshine prevails from 11 a. m. to 5 p. m. It is to be regretted that there are no absolute sunshine records at Red Bluff, Sacramento, Fresno and Los Angeles, however, considering the number of clear and partly cloudy days at the various places the approximate sunshine for each place is obtainable, and hence it can safely be assumed that at Los Angeles the per cent. of possible sunshine is 70, at Fresno 66 per cent., at Red Bluff 65 per cent., at Sacramento 60 per cent. and at Keeler 64 per cent. The sunshine at Los Angeles, 70 per cent., is the greatest in the United States save over Arizona, New Mexico, Southern Kansas and contigous sections where it amounts to from 74 to 77 per cent. of the possible, the greatest amount being at Tucson where it amounts to 77 per cent.

The following data obtained from the annual report of the Chief of Weather Bureau, for the year 1893, the latest published, may in this connection prove of interest and of value for it shows the main climatic conditions for the greater portion of California, as well as for the principal portion of the United States. The table is full of interesting deductions which can be made by the reader.

DATA FOR 1893.

Place.	Sunshine per cent.	No. days clear or partly cloudy.	No. days cloudy.	Total precipitation.	Temperature.	
					Mean Max.	Mean Min.
San Francisco	60	285	80	17.91	60.1	48.5
Red Bluff	*65	305	60	24.36	71.7	49.5
Sacramento	*60	286	79	16.59	69.6	48.1
Fresno	*66	304	61	9.40	74.2	47.9
San Diego	63	316	49	10.29	68-2	53.0
Los Angeles	*70	321	44	21.96	72 8	50.2
Eureka	*40	214	151	53.71	56 0	45.2
Boston	53	240	125	41.84	55.3	40.5
Buffalo	47	239	126	38.64	52,8	38.8
Chicago	*47	254	111	27.47	52.9	39.2
Cincinnati	47	253	112	44.00	62.1	45.3
Cleveland	42	222	143	33.88	55.4	40.7
Denver	67	326	39	8.43	69.3	37.9
Detroit	48	234	131	34 13	54.5	39.2
Dodge City	74	326	39	10.12	68.3	41.0
Eastport, Me	45	228	137	29.87	47.8	34.2
Galveston	59	288	77	35.43	75.1	65.4
Kansas City	57	282	83	32.13	62.5	43.2
Memphis	60	282	83	44.45	70.6	52.0
New Orleans	62	239	76	48.02	76.8	61.9
New York City	*47	255	110	43.01	58.4	44 2
Philadelphia	49	229	136	37.65	60.7	45.2
Portland, Or.	37	185	180	39.03	57.1	43.1
St. Louis	60	274	91	39.33	63.8	46.7
Salt Lake City	63	274	91	17.35	59.9	40.4
Santa Fe	74	334	31	14.94	69 1	38.7
Savannah	53	285	80	61.58	75.5	57.9
Tucson	77	316	49	13.12	81.9	50.4
Washington City	52	262	103	36.71	62.8	44.7

* Approximated.

Weather Bureau Office,
San Francisco, Cal.,
July 20th, 1895.

B. S. PAGUE,
Local Forecast Official.

Dr. W. B. Wood has opened an office in the Bryson Block. He will continue to reside at Orange.

SOUTHERN CALIFORNIA PRACTITIONER.

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107 North Spring street, Los Angeles.

Communications are invited from physicians everywhere; especially from physicians of the Pacific Coast, and more especially from physicians of Southern California and Arizona.

EDITORIAL.

THE AMERICAN ACADEMY OF MEDICINE.

This society of representative American physicians has now been organized twenty years. Its annual meetings are devoted largely to the discussion of first, Medical Sociology, second, Medical Education, and third, The Legislative regulation of the practice of Medicine. *The Bulletin*, which is published bi-monthly, is the organ of the Association of American Medical Colleges, and also of the organization that represents the various boards of State Medical Examiners. These lines of study have received full consideration in the columns of THE PRACTITIONER, and will continue to do so on every opportune occasion. At this time however we shall merely direct attention to a few statements made in a paper read before the Academy, by Dr. P. H. Millard of St. Paul, Minn., on Legislative regulation.

"One of the greatest evils of our system of medical teaching has been the flooding of our ranks with a board of poorly educated practitioners far in excess of our legitimate demands."

The latter assertion is convincingly illustrated by the statistics gleaned from the recent excellent paper of Professor Pepper on Medical Education

affording comparative statistics relating to the proportion of practitioners to the population in different countries of the globe.

TABLE INDICATING PROPORTION OF PHYSICIANS TO THE POPULATION.

Austro-Hungarian Empire	1 to 3,857
Belgium	1 to 2,841
France	1 to 2,666
German Empire	1 to 3,038
Italy	1 to 3,536
Netherlands	1 to 2,484
Norway	1 to 3,961
Russia	1 to 8,551
Spain	1 to 3,375
United States	1 to 500

The number of medical colleges indicates a similar disproportion.

NUMBER OF MEDICAL COLLEGES TO THE POPULATION.

Austro-Hungarian Empire	1 to 5,153,917
Belgium	1 to 1,534,111
Brazil	1 to 7,001,167
Canada	1 to 3,336,877
Chili	1 to 2,887,552
France	1 to 5,477,591
German Empire	1 to 2,471,923
Great Britain	1 to 2,358,767
Italy	1 to 1,445,109
Netherlands	1 to 660,249
Norway	1 to 1,988,771
Sweden	1 to 1,600,917
Russia	1 to 14,403,317
Spain	1 to 1,950,027
United States	1 to 440,151

It will be observed from the above that the proportion of practitioners and the number of schools are greatly in excess of other countries. Medical colleges in foreign countries are likewise independent financially, being, as a rule, directly supported by the state or possessing a direct university connection.

An investigation of this subject reveals beyond the possibility of successful controversion that the most efficient profession is found in those countries protected by efficient legislation; while a correspondingly low standard of professional fitness exists in countries not similarly protected.

At present approximately thirty states in our republic possess legislation regulating medical practice. Seventeen states have a form of statute that fails to recognize the diploma as evidence of fitness to practice; consequently they may be classed with those states operating under efficient acts.

Data have been obtained from the following named states: Alabama, Minnesota, Maryland, North Dakota, North Carolina, New York, New Jersey, Virginia and Washington.

The subjoined table indicates briefly the work of these boards:

State.	Examined.	Licensed.	Rejected.	Per cent. Licensed
Alabama	647	558	89	86.2
Maryland	150	105	25	80.6
Minnesota	641	499	142	77.8
New York	967	797	170	82.4
New Jersey	447	417	30	95.5
North Carolina	615	508	207	71.
North Dakota	81	76	5	93.8
Virginia	835	613	222	73.4
Washington	207	167	40	80.6
Totals	4670	3740	930	82.2

It will be observed that of four thousand six hundred and seventy persons examined but eighty-two and two-tenths per cent were successful in securing a license.

While the proportion of applicants successful is only eighty-two per cent., it will be found that from the schools heretofore operating under a high grade of requirements that, thus far at least in the work of these boards, nearly all graduates are successful in obtaining a license upon examination. In substantiation of this conclusion I again submit data, using therein the same schools as in my former paper.

The following table indicates the proportion of students successful on examination from alumni of schools heretofore operating under the three years' curricula:

Colleges.	Examined	Licensed.	Rejected.	Per cent. Licensed
Harvard	31	31	0	100.00
Columbia	123	118	5	95.20
Univ. of Penna	126	123	3	97.60
Univ. of Michigan	83	78	5	94.00
Northwestern Univ	26	22	4	84.60
Univ. of Minnesota	149	148	1	99.20
Total	538	520	18	96.41

I cannot but conclude, gentlemen, that efficient medical legislation will operate to bring about the following results, as applied to the profession and public.

1. It will protect the people by affording a profession of greater intelligence.

2. It will suppress charlatanry.

3. It will reduce the number of persons practising medicine to a number commensurate with the demands of the people.

4. It will reduce the number of medical colleges, at present far above legitimate demands.

5. It will raise the general standard of professional fitness, assuring us a professional prestige in the future, becoming the most important of the learned professions.

In conclusion, we appeal to the profession to renew their efforts in securing efficient medical legislation, believing its operations will result most beneficially to both the public and profession."

ANATOMY AND DIAGNOSIS.

The importance of an accurate knowledge of anatomy cannot be overestimated; both diagnoses and operative procedures are impossible without it. While this is true in all branches of medicine, no one realizes the great importance of anatomy more than the neurologist. Anyone who attempts to solve nature's pathological riddles as seen in nervous diseases, knows that the key to them is anatomy, with the aid of the comparatively easy branches of physiology and pathology which treat of the action of anatomy in health and disease. Indeed, anatomy should be the daily diet of both student and practitioner.

Take, for instance, the subject of neuritis, inflammation parenchymatous or interstitial of one or more nerves. While the symptoms vary according to form, the distribution may be as wide as the nerve periphery. Many troubles with especial names are but different mono-neurites; Bell's palsy is a neuritis of the seventh facial; shingles, an affection of some of the intercostal nerves; Erb's brachial paralysis, a traumatic neuritis; most cases of sciatica, a mono-neuritis of that nerve, and so, too, are many cases that are diagnosed rheumatism or neuralgia. These latter instances are the most fruitful sources of errors of any where general practice blends with neurology. Inasmuch as these diseases are the ready made diagnoses of the laity, they are too often accepted as final by the family physician. Just here comes in the value of accuracy in anatomical and allied knowledge — a knowledge which embraces muscles, their innervation and central representation in brain and cord, their physiology, and their pathology as exemplified by deficient action and diseases in which they are commonly involved. A careful consideration of the locality affected, of the condition of sensation, motion, reflexes, nutrition and electrical reaction, as well as history of the case, would in all cases differentiate neuritis from rhematism.

By carefully noting both what is and what is not involved and what has not been affected, that is, giving due weight to present conditions and past history, one can distinguish neuritis from functional troubles such as hysteria; from spinal diseases as poliomyelitis or tabes; from organic cerebral palsies, or general constitutional troubles such as rheumatism or leprosy. The chief characteristic of neuritis is the harmonious association of sensory and motor symptoms over the same *nerve areas*, long continued severe pain and tenderness over the nerves being pathognomonic of that condition. But to know the areas supplied by the various nerves, "there's the rub." Hysterical paralyses are regional, irrespective of innervation; then, again, the many other stigmata of this malady whose protean manifestations are partially shadowed in Knies' definition as "a vasomotor neuroparesis multiplex variabilis" will usually make plain the diagnosis.

The regional distibution, mode of onset, flaccidity, loss of reflexes and atrophy in multiple neuritis, form a syndrome, which will differentiate it from the sudden poliomyelitis, the slow tabes, and cerebral palsies from any cause. Of all these, polyneuritis and poliomyelitis are the most alike,

but even here the former is more apt to be functional and the latter anatomical, with pain and tenderness following the neural distribution

Acute articular rheumatism may closely resemble both of these troubles, but the ephemeral nature of the trouble attacking now this and now that joint while lighting up those first involved, is a convincing point in diagnosis.

After a due consideration of all the facts there still remains the possibility, and at times the probability even, of multiple troubles, the same cause setting up an articular rheumatism, multiple neuritis and poliomyelitis. A multiplicity of troubles connected with neuritis the writer has seen in two remarkable cases. The first case, a man who in 1888 at Vienna was seen in the throat clinic for aphonia, in the nervous for neuritis, and finally in the skin department for anæsthetic leprosy. A second instance during the past year was that of a man with an obscure early history, having passed through an acute attack of undoubted multiple neuritis, who improved greatly, but later developed persistent neuritis with trophic disturbances and in the last four months showed marked signs of leprosy. There are three things needed as the price of correct diagnosis: close observation, correct anatomical knowledge and sufficient time for development of symptoms. Both dermatologist and neurologist were correct in each instance, but the skin sharp, having the last call, gave the final answer.

"What is the use," says an easy going medico, "of such refinement in diagnosis? It matters little to the patient to be told by one physician that he has neuralgia, and by another that it is neuritis. The chief difference is the fee of the consultant. Sciatica is just as provocative of internal malediction or external profanity under one name as under another."

But the knowing what the matter is, is a long step toward knowing what to do for it. Then, too, it is only by realizing conditions that we determine causes, and only so far as we ascertain causes are we prepared to even seek methods for their removal and thereby fulfill that most important branch of treatment, prophylaxis It is of great importance that a case of anesthetic leprosy should be recognized as early as possible, before, by open sores, he becomes a menace to public health. The medical watch dogs must be thoroughly trained so as to be able to scent the pathological wolves which masquerade as simpler diseases. Tonsilitis and German measles are at times very like diphtheria and scarlet fever — yet it is very important to recognize the latter in their true nature. Good advice to the young practitioner would be; prepare for the worst, hope for the best, trust in the Lord and keep fresh in anatomy.

Dr. E. C. Dudley, the Chicago gynecologist has been spending a few days in Los Angeles. He was lunched by Dr. Norman Bridge and dined by Dr. John R. Haynes.

EDITORIAL NOTES.

Dr. R. A. Toms, recently of Baltimore, has located at Springville.

Dr H. T. Darcy, of Phoenix, Ariz., contemplates locating in Prescott soon.

Dr. Edward J. Carroll, of Brooklyn, N. Y., is registered at Bellevue Terrace.

Dr. Harold Tyndale has moved to Mentone but will continue to practice in Redlands.

Dr. W. G. Scott, of Orange, has moved to Glendale, where he will practice his profession.

Dr. T. Hardy Smith of Pomona and Miss Frances Helen Flood were married June 25th.

Dr. D. W. Hasson, who has been practicing for several years in Mentone, will soon open an office in Redlands.

Dr. A. D. Bedford, of San Bernardino, who has been taking a course in ophthalmology in Chicago the past two months, has returned home.

Dr. C. L. Bard of Ventura has been quite ill with suppurative tonsilitis; we are glad to hear that, although not fully recovered, he is convalescent and able to attend to his practice.

Dr. G. E. Goodfellow having resigned as physician for the Southern Pacific Railroad company at Tucson, Dr. H. W. Fenner has been appointed to the position, to assume his duties July 1st.

Dr. S. M. McLean, a resident of Stockton in early days, and for many years a practicing physician in Modesto, died July 12th, at the home of his son, Dr. R. A. McLean, in San Francisco.

Physicians like good offices and the completion of a building is usually marked by more or less of a "moving." Drs. W. W. Hitchcock, J. H. Davisson, W. G. Cochran and W. C. Burke have established themselves in the handsome Byrne Block.

The Orange County Medical Association met in July at the office of Dr. Rubleman who read an interesting paper on diphtheria. The next meeting will be the first Tuesday in August with Dr. Allingham in Tustin and the subject "Typhoid Fever."

The following health-officers have been appointed for the ensuing year in the various towns: Dr. G. A. Rene, San Bernardino; Dr. A. R. Rhea, Calico; Dr. J. P. Booth, Needles; Dr. C. D. Watson, Ontario; Dr. C. C. Brown, Highlands; and Dr. F. M. Seibert, Chino.

There was a large attendance at the last regular meeting of the Pasadena Medical Society in Dr. F. F. Rowland's office. Dr. W. S. Hereford presented an admirable paper on "Some of the People of Alaska." Dr. Royal was appointed to furnish the paper for the next meeting.

Los Angeles is to have a training-school for nurses, with a two years' course of instruction, at the County hospital. Graduates from public schools and universities are preferred who have a love for and adaptability to such duties. We wish the new undertaking success.

Dr. H. Bert Ellis, senior editor of the SOUTHERN CALIFORNIA PRACTITIONER, has been quite seriously ill from rheumatism since the first of June. We are happy to state he is now about recovered. He will take a vacation during August. In the meantime Dr. W. Walter, an eye and ear specialist from Michigan, has charge of his practice.

New members received at the Fifteenth Semi-Annual Meeting of the Southern California Medical Society were ten in number, viz: Dr. R. D. Barber, South Riverside; Dr. D. L. Beckingsale, Covina; Dr. C. A. Briggs, Pasadena; Dr. T. S. Covernton, Ontario; Dr. Frank Garcelon, Pomona; Dr. R. J. Hall, Santa Barbara; and Drs. A. L. MacLeish, W. H. Fales, C. E. Stoner and C. H. Whitman of Los Angeles.

That the School of Pharmacy of the Northwestern University, Chicago, is the best equipped in the United States, is an accepted fact; for which credit is due its presiding genius, Oscar Oldberg, the Dean. It has recently been strengthened by the addition of two men of national reputation, Mr. Henry Kraemer and Mr. Jan B. Nagelvoort; the latter will devote his entire time to the laboratory courses of the second year, the most important part of which is pharmaceutical assaying and related analytical work such as the pharmacists and the sanitary public analysts of the future must be prepared to perform.

Los Angeles is rapidly assuming metropolitan airs and the medical profession does not intend to be left behind in its progress. The medical department of the University of Southern California will soon begin their building on Buena Vista Street. The Los Angeles Polyclinic seems to be established on a firm basis with the following staff: Drs. A. and T. Davidson, A. L. MacLeish, E. A. Praeger, Wm. Allen, E. W. Fleming, J. H. Seymour and W. H. Fales. The latest move has been the filing of articles of incorporation of the Pacific College of Obstetrics and Maternity Institute. Their object is defined in their name. The trustees are the following: Drs. H. Newland, J. W. Trueworthy, J. T. Stewart, R. Wernigk, and O. D. Fitzgerald.

Through the courtesy of the Secretary, Dr. H. S. Gordon, we are informed that at the June meeting of the Pomona Valley Medical Society a paper on La Grippe and its aural complications was read by Dr. T. J. Dills of Ontario. A committee was appointed to inquire into the feasibility of organizing a small hospital in Pomona (it has been found impracticable). At the next meeting, July 25th, 3 p. m., Dr. Howeth of Pomona will read a paper on Addison's Disease and Dr. Hunt of Claremont, one on Infantile paralysis. Dr. Gordon says they would like a paper from some of the Los Angeles physicians to help them along. We make note of the desire, but think from reports received that this *infant* society is showing itself quite capable of *walking alone.*

We are pleased to hear that Dr. S. A. Knopf received the degree of *Doctor of Medicine* from the University of Paris, June 20th, 1895. He was fortunate in receiving the highest mark "*extremement satisfait*," for which, considering that he was studying in a foreign tongue, he is very much to be congratulated. We have received a copy of the Faculty edition of his thesis which is a very exhaustive study of "The sanitary treatment and prophylaxis of pulmonary phthisis." This edition is interesting as showing the form in which the theses are always gotten up at the University of Paris; each professor and adjunct-professor receives a copy and the Faculty exchanges with all the University-libraries of the world.

Dr. and Mrs. Knopf are now making a trip thro' Holland and Belgium and will spend a few months at Falkenstein. The Dr. will devote the fall and perhaps the winter to special studies.

Dr. Richard S. Den, the Nestor of the medical fraternity in Los Angeles, was found dead in his rooms in the Baker block Monday afternoon, July 22nd, where he had quietly died probably Saturday night. Dr. Den was one of the picturesque figures of Los Angeles. His courtly personage was a familiar sight to all old residents, and he was a typical Irish gentleman of the old school. Loved and respected he was by all who knew him. He was born in Ireland in 1821, graduated with high honors from Dublin University in 1842. He came to Los Angeles in 1844, was here during the Mexican war, acting as chief physician and surgeon to the Mexican forces in Southern California. In 1848 he went to San Francisco; in 1854 he went to Santa Barbara. In January, 1866, he moved to Los Angeles, where he has ever since lived, practicing his profession, until within the past few years, when he retired from active practice.

PAMPHLETS RECEIVED.

THE TREATMENT OF LARYNGEAL TUBERCULOSIS BY THE APPLICATION AND SUBMUCOUS INJECTION OF CREOSOTE, By Walter F. Chappell, M.D., M.R.C.S. Reprint from the N. Y. Med. Journal, March 30, 1895.

PHYSIOLOGICAL TORSION VERSUS "INSUFFICIENCY OF THE OBLIQUES," Reply by F. B. Eaton, M.D., Portland, Ore. Reprint from the Ophthalmic Record, March, 1895,

PREVENTION AND TREATMENT OF OPHTHALMIA NEONATORUM AND THE NECESSITY FOR MORE EFFICIENT LEGISLATION TO PREVENT BLINDNESS FROM THIS CAUSE, By Chas. H. May, M.D., New York. Reprinted from the Medical Record, Feb. 10, 1895.

HAWAIIAN CABLE AND ANNEXATION. Speech of Hon. Stephen M. White in the Senate of the United States, Feb. 8, 1895.

A NEW WOOL TEST FOR THE DETECTION OF BLINDNESS. The Practical Examination of Railway Employees as to Color Blindness, Acuteness of Vision and Hearing. By William Thompson, M.D., Philadelphia. Reprints from the Medical News.

BIENNIAL REPORT OF THE TERRITORIAL HEALTH AND QUARANTINE OFFICER TO THE GOVERNOR OF ARIZONA FOR THE YEARS 1893-1894. By George Goodfellow, M.D.

DIAGNOSIS OF PREGNANCY DURING THE FIRST THREE MONTHS. By Chas. P. Noble, M.D. CELIOTOMY FOR PUERPERAL SEPTICEMIA AND PERITONITIS. By the same. Reprint from the Amer. Gynecological and Obstetrical Journal. REMARKS ON THE TREATMENT OF INEVITABLE ABORTION. By the same. Reprint from Codex Medicus, Philadelphia, Oct. 1894.

REPORT OF THE KENSINGTON HOSPITAL FOR WOMEN. From Oct. 1893 to Oct. 1894. Philadelphia.

REPORT OF A CASE OF PATHOLOGICAL SEPARATION OF THE LOWER EPIPHYSIS OF THE FEMUR. By A. H. Leisenbach, M.D., St. Louis. Reprinted from Annals of Surgery, Feb. 1895.

MONTHLY BULLETINS OF CALIFORNIA WEATHER SERVICE. Published by the State Agricultural Society, Compiled by Jas. A. Barwick, Sacramento, Cal.

THE RELATION OF STATIC DISTURBANCES OF THE ABDOMINAL VISCERA TO DISPLACEMENTS OF THE PELVIC ORGANS. By J. H. Kellogg, M.D. Reprint from proceedings of International Periodical Congress of Gynecology and Obstetrics, 1892. Brussels, Belgium.

VAGINAL CELIOTOMY. By Harold N. Vineberg, M.D., New York. Reprint from Med. Record, March 2, 1895. THE TECHNIQUE AND INDICATIONS OF VAGINO-FIXATION (MACKENRODT'S OPERATION.) By the same. Reprint from N. Y. Med. Jour., Oct. 1894. TUBAL MOLE PREGNANCY. By the same. Reprint from N. Y. Med. Jour., March 23, 1895.

SOME IMPRESSIONS OF GYNECOLOGY IN EUROPE. By Hunter Robb., M.D. Reprint from Western Reserve Med. Jour., Jan. 1895.

EARLY DIAGNOSIS OF CARCINOMA OF THE STOMACH, WITH THE BACTERIOLOGY OF THE STOMACH CONTENTS. By Fenton B. Turck, M.D., Chicago.

BOOK REVIEWS.

URINALYSIS INCLUDING BLANKS FOR RECORDING THE ANALYSIS AND MICROSCOPIC EXAMINATION OF THE URINE. For Medical Practitioners, Life Insurance examiners and Specialists. Arranged by Joseph C. Guernsey, A. M., M. D., Philadelphia. J. B. Lippincott Company, 1895.

A few pages of concise directions as to testing for albumen, bile, blood, chlorides, indican, phosphates, pus, solids, sugar, sulphates, urates, urea, uric acid and urobilin; a description of centrifugal analysis; a dietary for Bright's disease and one for diabetes, precede the blanks for recording, of which there are 500. This is the only work of the kind on the market, and is valuable as a case record. The only improvement the reviewer could suggest would be that the record be kept in duplicate, the report to be given to the family physician or patient and its duplicate kept by the examiner,—a plan which has been followed by the reviewer for six years. The habit of examining the urine in all cases is a good one, and the recording of all abnormalities equally to be commended, so we hope these blanks will have a wide use.

THE CARE OF THE BABY. A manual for Mothers and Nurses containing practical directions for the Management of Infancy and Childhood in Health and in Disease. By J. P. Crozer Griffith, M. D., Clinical professor of Diseases of Children in the Hospital of the University of Pennsylvania etc. Philadelphia. W. B. Saunders, 925 Walnut St. 1895. $1.25

This seems to be a sensible, practical and plain talk on an every day subject, and while especially intended to enlighten the young mother and the nurse, contains much that is of interest and value to the young practitioner. It is a book written by a scientific man for the correct guidance of the laity in which he writes in as simple and plain language as is consistent with scientific accuracy. It treats of what is needed in confinement; how to clothe, bathe, feed and care for the baby. It describes the healthy child and gives the symptoms of the various common diseases of children. It also rehearses the remedies usually employed, their dosage and antidotes for the poisons to which children are apt to be exposed. When there are so many "fake" guides for mothers—who so often sorely need a wise director—it is refreshing to see a work on this subject which seems to be written by a man of good sound common sense.

A MANUAL OF THE MODERN THEORY AND TECHNIQUE OF ASEPSIS. By Carl Beck, M. D., visiting surgeon to St. Mark's Hospital and to the German Polyklinik of New York City, with 65 illustrations in the text and 12 full page plates. Philadelphia. W. B. Saunders. 1895. $1.25

To those accustomed almost daily to see perfectly aseptic surgery it seems unnecessary to insist on painstaking faithfulness in the details of obtaining absolute cleanliness. It falls to the lot of the reviewer to see many operators, and the majority of them are very careful in minutiae—rare indeed is there a case infected by the surgeon. Once in a while there comes along an operator who makes a great hue and cry as to the necessity of perfect cleanliness and yet fails in the little things, and undoes all his labored attempts at asepsis by palpable and to him perfectly innocent carelessness. Hence the room—rather the crying need for such a work as this which so systematically and persistently attends to all the details of the operation—patient, surgeon, assistants, room, dressing in the wounds, etc. That with which the reviewer is most familiar is advocated, scrubbing with soap in hot water, permanganate, oxalic and bichloride solutions, with sterilization of dressings, instruments, etc., by steam. Iodoform still holds its own. Beck favors the Clover inhaler—Parkinson's the modification by Dr. Kuben of New York or Dr. Bullard of Los Angeles is better —for they, especially the latter are very simple and easily cleansed.

DOSE BOOK AND MANUAL OF PRESCRIPTION-WRITING. With a list of the official drugs and preparations, and also many of the newer remedies now frequently used, with their doses. By E. Q. Thornton, M. D., Ph. G., demonstrator of Therapeutics, Jefferson Medical College of Philadelphia. Philadelphia, W. B. Saunders, 1895. $1 25

It gives both the English and the metric systems and the method of converting one into the other, teaches *prescription writing*—the grammatical construction, principles of medical combinations chemical, therapeutical and physical incompatibility. Then follows the main part of the book, an alphabetical list of drugs with very few remarks, a mere line or two, and their dosage. The reviewer found the portion in prescription writing of value in instructing a class in medical Latin this spring. It is handy and now necessary to have some work giving the dosage of recent remedies—here is one which does this for both new and old remedies.

RELATIONS OF DISEASES OF THE EYE TO GENERAL DISEASES. By Max Knies, Professor Extraordinary at the University of Freiburg. Forming a Supplementary Volume to every Manual and Text-book of Practical Medicine and Ophthalmology. Edited by Henry D. Noyes, A.M., M.D., Professor of Ophthalmology and Otology in Bellevue Hospital Medical College, etc., etc. Octavo, 470 pages, illustrated, extra muslin, price, $4.25. Wm. Wood & Co.

Disturbances of the eye possess so important significance in the diagnosis of diseases of other organs, notably of the nervous system, that a systematic, thorough and complete discussion of them in those relations must needs be of great value to the diagnostician. This Knies essays to do, indeed so accurate and extensive are his observations in this book that the specialist, whether neurologist or ophthalmologist, will find as much to profit him as will the general practitioner.

Knies lays broad his foundation on physiological and pathological bases, reasons with accuracy, states in clear concise terms his opinions and deals with his subject in general in such a manner as to convince the reader as to the correctness of his views and firmly impress on him the fundamental facts involved. On page 13 in speaking of the optic nerve he says: "The retina is an outlying part of the cerebral cortex" and the optic nerve "a system of association fibres." This of course is merely a comparison, but we cite it as an instance of the author's method of instruction.

Over half of the work is devoted to the relations of different eye abnormalities to nervous diseases, and as this is so wide a subject the psychology of nearly the whole brain must be more or less discussed. In this part of the work Knies discusses:

A. Anatomical course of the nerves of the eye.

B. Disorders in the domain of the ocular nerves and their central origin.

C. Relations between the blood vessels and the eye.

D. Relations between the eye and the lymphatics.

E. Individual disease of (*1*) the brain, (*2*) spinal cord, (*3*) nerves, (*4*) functional neuropsychosis.

In the latter half of the book, diseases of the skin, of the digestion, respiratory, circulatory, urinary, and sexual organs, as well as poisons and infectious and constitutional diseases, are considered in their mutual effect on the eye. While the most of the first part of this book can be found here and there in a few standard works, the facts in the latter half could be culled only from a large library. This grouping of the eye symptoms in general diseases contains matter of mutual interest and value to the general practitioner and ophthalmologist.

The reviewer can hardly agree with a statement on page 237 that agaraphobia or fear of places is epileptic in character. Agaraphobia rather is a neurasthenic condition having an occasion in environment, epilepsy on the other hand being entirely subjective in origin. On page 223 the author fulfills a long felt want and expressed the secret thought of the reviewer in giving a truly scientific definition of hysteria, viz., that it is merely a "vasomotor neuroparesis multiplex variabilis." He regards the phenomena of hysteria as due to injurious influences on the peripheral nerves in a majority of cases.

A TREATISE ON THE NERVOUS DISEASES OF CHILDREN, FOR PHYSICIANS AND STUDENTS, by B. SACHS, M. D., Professor of Mental and Nervous Diseases in the New York Polyclynic: Consulting Neurologist to the Mt. Sinai Hospital; Neurologist to the Montefiore Home for Chronic Invalids; Ex-President of the American Neurological Association. One volume, 688 pages, 8vo, illustrated by 169 engravings in black and color, and a colored plate. Muslin, $5.00. Wm. Wood and Company, New York, 1895. 43-47 East Tenth Street.

The plan of this work includes "all those diseases which occur frequently during early life, or which when occurring at this period have some distinctive features." The introduction on methods of examination shows great accuracy in details. Among other things it contains some truths of universal merit on muscles, normal function, symptoms arising from their deficient action, their innervation, central representation and diseases in which they are commonly involved. While insisting on a minute personal examination he lays great stress on *inspection*, believing that by careful exercise the faculty of observation will be greatly sharpened.

The book is divided into two great parts — functional nervous troubles and organic diseases. He treats of the former troubles first, and at length, because of their relative frequency in childhood, and also because they usually do not receive a proper amount of attention in books on neurology.

Under eclampsia infantum he lays great stress on rachitis as a cause, speaks, we think, too lightly of the value of hot baths and favors too large doses of chloral grs. v-x t.i.d. In tetanus, on the other hand, he does not push this remedy quite hard enough, advocating five to fifteen grains "several times a day." That dosage every other hour until some effect is seen, would be borne in so grave a malady. He rightfully maintains the gravity of spasm, and the necessity of their early control if possible. He regards *idiopathic* epilepsy as a

rare disease, presuming some antecedent cause such as a recovered hemiplegia. The prognosis of either the organic or idiopathic variety is very gloomy. He thinks epilepsy due to a diffuse neuroglia sclerosis. Hysteria is an exceedingly rare disease in childhood — indeed he thinks much rarer anyhow than is supposed. Chorea he treats by rest, good food, proper hygienic surroundings and arsenic. Indeed in all functional diseases of childhood he advocates rest, especially from the annoying rivalry of schools and the solicitous care of parents. Tetany, migraine, disorders of sleep and vasomotor and trophoneuroses complete the topics discussed in the first part of the work.

In the latter and more exact portion of the book he treats of the diseases of the peripheral nerves first. The chapter on multiple neuritis is especially well written. The anatomy, physiology and pathology of the spinal cord are then discussed. There then follow ten articles on the various organic spinal affections common to childhood — on anæmia and hyperæmia, infantile spinal paralysis, acute myelitis, specific myelitis and meningo myelitis, disseminated sclerosis, compression tumors, hereditary or family diseases, progressive muscular atrophy, and conditions due to defective development of the cord.

The chapter on the anatomy, physiology and pathology of the brain compresses into thirty-six pages about as much practical knowledge as one could imagine could be expressed in that space. The diagrams and illustrations are clear and helpful though not original. Meningitis, encephalitis, hydrocephalus, infantile cerebral palsies, tumors of the brain and its meninges, abscess of the brain, diseases and conditions due to defective development of the brain, insanity, idiocy and imbecility are the titles of chapters in the last third of the book. There is a short appendix on the rest cure, hydrotherapy and a list of the few drugs he uses in nervous disorders. They are arsenic, amyl nitrate, atropine, the bromides, caffein, iron, mercury, hyoscine, the iodides, morphine, phosphorus, strychnine, sulphonal and trional, together with their dosage and indications.

Those who have an extensive practice in diseases of children will find this a most welcome addition to their library. While it treats of nothing new, it handles the intricacies of neurology as seen in paedopathy in a concise and refreshing manner.

The Eye in its Relation to Health. A. C. McClurg & Co. will shortly publish "The Eye in its Relation to Health," by Chalmer Prentice, M. D. The author posesses two qualifications favorable to success—an evident knowledge of his subject, and confidence that he is the possessor of a truth that the world ought to know. He unfolds his theory somewhat after this fashion: Every function of the bodily organs is controlled by the nerves, and when an organ—be it the liver, kidneys, heart, or any other, does any work different from that assigned to it, we may infer that it has received some abnormal nervous impulse. Next, Dr. Prentice directs the attention of his readers to these pertinent considerations: 1. The visual nerves are more sensitive than those that govern the action of most other parts of the body. 2. In more than ninety-nine persons in a hundred the visual nerves suffer a constant strain because of defects in the ocular muscles—defects that are usually unsuspected by the patient. 3. This eye-strain, acting from the hour of birth, often produces disease in organs remote from the eye. The author then goes on to show that by repressing this strain he has effected some remarkable cures of consumption, deafness, diabetes ovaritis, prostatitis, etc. Being thoroughly original, the book is sure to attract attention.

In the August number of the *Overland Monthly* there is to be begun a serial of San Francisco life by Horace Annesley Vachell that is sure to make a sensation. Somewhat disguised and composited, many of the best known men of the city appear in it. It is called "The Quicksands of Pactolus," and centers in the fortunes of the family of a leading railroad magnate, who though he differs in some important ways from the President of the Southern Pacific, yet might be any one of several successful men of San Francisco. Mr. Vachell's recent books, "The Model of Christian Gay" and "Judge Jetchum's Romance," and his series of short stories in the *Overland*, "The Chronicles of San Lorenzo" have made his work well known to California, Eastern and English readers;—for the novels were published simultaneously in London and New York. The new story will add very largely to his fame.

NEARLY READY.— We beg to announce that we have in preparation for early issue an authorized translation by Dr. Albert B. Hale, Chicago, of a HANDBOOK OF DISEASES OE THE EYE, by Dr. A. Eugen Fick, of the University of Zurich. This is one of the most complete, thorough, and compact of text-books. Among its other merits it contains a number of very handsome colored illustrations, not of rare or unusual cases, but of practical matters that will greatly aid the student and be of much service to the practitioner. The retail price will be from $3.00 to $4.00. P. Blakiston, Son & Co., 1012 Walnut Street, Philadelphia.

MEDICINE is the title of a new monthly medical journal edited by Harold N. Moyer of Chicago and published by Geo. S. Davis of Detroit. It starts out as a journal of first-class merit, containing good articles, able reviews and departments in the different branches of medicine under the charge of well known Chicago Specialists and teachers. Medicine deserves success and we hope it will receive it.

SOUTHERN CALIFORNIA SANITARIAN AND CLIMATOLOGIST edited by Henry Sherry, M. D., of Redlands is a new medical journal which has for its mission the "interests of sanitation and the dissemination of the knowledge of climatology of Southern California and the adjacent Southwest." This is the particular field occupied by the NATIONAL REVIEW edited by Dr. Remondino of San Diego. San Bernardino County does not wish the city of bay-and-climate to monopolize good things so it will have a climatological journal too. The glorious climate of California is a big thing and will stand all that can be said of it, so here's to the success of the new journal.

PROTONUCLEIN is based on the fact that all living beings are possessed of some property which enables them to resist poisonous influences, The resisting property exists in the blood in the white blood corpuscle, or leucocyte. *Nuclein* is the direct product of the leucocyte. Animals possess this property in a far higher degree than man, being able to resist influences that would be fatal to the human organism. By preparing *Protonuclein* from the lymphoid tissues of such animals when they are in the prime of life and in perfect health, we get products which possess the antitoxic and tissue building properties in the highest degree.

See advertisement of Henry Kahn & Co., on page xviii.

MONTHLY METEOROLOGICAL SUMMARY.

U. S. WEATHER BUREAU, LOS ANGELES STATION.

Los Angeles, California. *Month of June, 1895.*

Date	TEMPERATURE Max.	Min.	Mean	Precipitation in inches and hundredths
1	67	51	59	0
2	73	47	60	0
3	86	52	68	0
4	100	54	77	0
5	77	56	66	0
6	76	56	66	0
7	73	56	64	0
8	73	56	64	T
9	72	57	64	0
10	70	51	60	0
11	72	52	62	0
12	72	52	62	0
13	72	54	63	0
14	75	54	64	.01
15	74	56	65	0
16	75	49	62	0
17	84	50	67	0
18	89	53	71	0
19	89	5	70	0
20	89	56	72	0
21	81	57	69	0
22	79	58	68	0
23	78	58	68	0
24	74	57	68	0
25	75	58	66	0
26	75	58	66	0
27	73	56	64	0
28	76	57	66	0
29	77	56	66	0
30	78	53	66	0
31				

SUMMARY

MONTHLY RANGE OF BAROMETER:

Mean Barometer, 29.95.
Highest barometer, 30.04, date 29.
Lowest barometer, 29.87, date 7.
Mean Temperature, 66°.
Highest temperature 100°, date 5.
Lowest temperature 47°, date 2.
Greatest daily range of temperature 38°, date 19.
Least daily range of temperature 15°, date 9.

MEAN TEMPERATURE FOR THIS MONTH IN

1877		1883	71°	1889		66°
1878	67°	1884	68°	1890		68°
1879	68°	1885	67°	1891		66°
1880	66°	1886	67°	1892		64°
1881	67°	1887	68°	1893		66°
1882	66°	1888	69°	1894		63°
				1895		66°

Mean temperature for this month for 17 years, 67°
Total deficiency in temp. during the month, °
Total deficiency in temp. since Jan. 1. 96°
Prevailing direction of wind, West.
Total movement of wind, 2667 miles.
Maximum velocity of wind, direction, and date, 15m, W. 4th.
Total Precipitation, .01 inches.
Number of days on which .01 inch or more of precipitation fell, 1.

TOTAL PRECIPITATION FOR THIS MONTH IN

1878	.07	1884	1.34	1890		.02
1879	.03	1885	T	1891		.00
1880	.00	1886	.11	1892		.06
1881	.00	1887	.07	1893		.03
1882	T	1888	.01	1894		T
1883	.03	1889	.01	1895		.01

Average precip'n for this month for 17 years, .13.
Total deficiency in precip'n during month .12 inches.
Total precip'n from Sept. 1,'94, to date, 16.10 inches.
Average precip'n from Sept. 1,'94, to date, 18.32 inch.
Total deficiency from Sept. 1,'94, to date, 2.22 in.
Average rainfall for 10 wet seasons, 21.58 inches.
Number of clear days, 9.
" partly cloudy days, 21.
" cloudy days, 0.

NOTE—Barometer reduced to sea level. "T" indicates trace of precipitation.

METEOROLOGICAL SUMMARY SOUTHERN CAL., JUNE, 1895.

STATIONS	TEMPERATURE Mean	Max.	Min.	Mean Barometer	Relative Humidity	RAINFALL Days	Am't	WEATHER Clear	Fair	Cld'y	WIND Direc-tion	Total Mov't
Los Angeles	66.	100.	47	29.95	73.	1	.01	9	21	0	W	2,667
San Diego	03.	77.	51.	29.96	78.	0	.0	21	6	3	W	4,083
Santa Barbara	62.5	90.5	49.5		76.	1	.05	20	4	6	SE	3,144
Yuma	85.	109.	53.	29.78	36.	0	T	28	2	0	SW	3,712
Arlington Heights	69.	101.	43.			0	0	20	10	0	W	
Ontario	74.	100.	56.			0	0	29	0	1	W	
Pasadena												
Redlands	74.	100.	58.			0	0				W	
San Bernardino	70.1	99.	42.			0	0	24	6	0	W	
Santa Ana	76.	102.	58.			0	0				SW	

OBSERVERS.—George E. Franklin, U. S. Weather Bureau, Los Angeles; M. L. Hearne, U. S. Weather Bureau, San Diego; Hugh D. Vail, Santa Barbara; A. Ashenberger, U. S. Weather Bureau, Yuma. JAMES A. BARWICK, Director California Weather Service, Sacramento, Cal.

REGISTERED MORTALITY OF LOS ANGELES.

WITH SEX AND NATIVITY OF DECEDENTS.

Estimated Population, 80,000. *June, 1895.*

CAUSE OF DEATH	Total Deaths	Annual rate per 1000	SEX		NATIVITY				RACE		
			Male	Female	Los Angeles	Pacific Coast	Atlantic States	Foreign Born	Caucasian	African	Mongol
Deaths from all causes	94	14.1	64	30	13	13	44	24	90	3	1
Deaths under 5 years	18										
i. Specific infectious diseases	22		15	7	4	4	11	3	20	2	
ii. Diseases of digestive system	10		6	4	6	2	1	1	10		
iii. Diseases of respiratory system	23		17	6	1	2	9	11	22		1
iv. Diseases of nervous system	9		6	3	1		6	2	9		
v. Diseases of circulatory system, blood and ductless glands	5		2	3		1	3	1	4	1	
vi. Diseases of genito-urinary org'ns	2		1	1			2		2		
vii. Constitutional diseases	2		1	1			1	1	2		
viii. Intoxication, violence, accidents	7		7			1	4	2	7		
ix. Miscellaneous diseases	14		9	5	1	3	7	3	14		
i. Septicæmia											
Pyæmia											
Diphtheria	1		1				1		1		
Erysipelas											
Typhus fever											
Typhoid fever	2		1	1	1			1	2		
Malaria fever											
Scarlet fever	1		1				1		1		
Measles											
Cerebro-spinal meningitis	2		1	1	1	1			2		
Smallpox											
Tuberculosis	13		9	4		2	9	2	12	1	
Influenza	2		1	1	1	1			1	1	
Dysentery	1		1		1				1		
Syphilis											
Tetanus											
ii Diseases of the œsophagus											
Gastritis											
Gastro-enteritis	5		3	2	3	2			5		
Cholera infantum	4		3	1	3			1	4		
Enteritis											
Appendicitis	1			1			1		1		
Intestinal obstruction											
Diseases of liver											
Peritonitis											
iii. Membranous croup											
Bronchitis	1			1				1	1		
Pneumonitis	4		3	1			2	2	4		
Pleuritis	1		1			1			1		
Phthisis	16		12	4	1	1	7	7	15		1
iv. Diseases of brain	8		5	3	1		5	2	8		
Diseases of spinal cord											
Eclampsia											
Epilepsy	1		1				1		1		
v. Diseases of heart	5		2	3		1	3	1	4	1	
Degeneration of arteries											
Aneurism											
Anaemia											
vi. Uraemia											
Acute Bright's disease	2		1	1			2		2		
Chronic Brigh'ts disease											
Diseases of genital-organs											
vii. Rheumatism	1			1				1	1		
Gout											
Diabetes											
Inanition											
Senility and Asthenia	1		1				1		1		
viii. Alcoholism	1		1				1		1		
Opium habit											
Suicide	3		3				3		3		
Violence and accidents	3		3		1	1		2	3		
ix. Tumors—malignant	4		3	1		1		3	4		
Tumors—non-malignant	2		2		1		1		2		
Other diseases	8		4	4		2	6		8		

F. W. STEDDOM, M.D., Health Officer.

OUR ADVERTISERS.

J. W. Snowden, M. D., A. E., San Jose, California, on April 12th, 1895, writes: Your Bromidia acts like a charm. I believe it is a safe, effectual and and reliable Hypnotic.

Great Relief.—J. Ringwood, L. R. C. P. I. and L. M. L. R. C. S. I., Kells, County Meath, Ireland, writes: "I have had the most satisfactory results from the use of Lilly's Glycones. Besides their certain gentle action on the bowels, they give the greatest relief in all cases of pelvic congestion, pruritus and internal hemorroids."

J. E. O'Connor, M. B., B. Ch., Leicester, England, says: "In a case of urethritis accompanied by cervical cystitis and urethral synovitis the administration of sanmetto was attended with most satisfactory results. The drug appears to relieve the pain, reduce the irritation and produce healing and cessation of the muco-purulent discharge more speedily and efficaciously than any other remedy yet offered to the profession. In the case alluded to a marked improvement in the condition of the effected portion of the urinary tract was speedily followed by disappearance of the arthritic trouble. The patient had previously been treated with santal oil, salicylate of soda and acetate of potash."

In line with the progressive spirit that seems to animate the pharmaceutical guild, the Mellier Drug Company of St. Louis, in addition to Tongaline, liquid, now present that most reliable rheumatic and neuralgic agent in tablet form. For those cases, which in addition to the rheumatic and neuralgic features, exhibit any excess of Uric or Lithic Acids, they make Tongaline and Lithia Tablets, Tongaline 5 grs., Lithium Salicylate 1 gr. Where the rheumatism and neuralgia is accompanied by malarial conditions, they have Tongaline and Quinine Tablets, Tongaline 3½ grs., Quinia Sulph. 2½ grs. Samples and literature mailed on application to the Mellier Drug Company, 2112 Locust St., St. Louis.

For Gastro-Intestinal Diseases.—The well-known therapeutical properties of the following drugs make this combination desirable in such intestinal affections as Fermentative Dyspepsia, Diarrhœa, Dysentery, Duodenal Catarrh, Cholera Infantum, and Typhoid Fever. The Antikamnia controls the pain as effectually as morphine, and yet is never followed by any of those undesirable effects so characteristic of opium and its derivatives. Freedom from pain saves an immense amount of wear and tear to the system and places it in a much better position for recovery. The Salol acts as an antiseptic aud removes from the intestinal canal the first or continuing cause of the affections just mentioned. The Quinine acts as a tonic, increasing the appetite, and thus contributing much to a speedy recovery. Hare says that Quinine is not only a simple bitter, "but also seems to have a direct effect in increasing the number of the red blood corpuscles." A tablet composed of Antikamnia two grains, Quinine Sulph. two grains, and Salol one grain, allows of the easy administration of these drugs in proper proportionate doses.

Dr. Deering J. Loberts, Late Professor of Theory and Practice of Medicine) in the Medical Department of the University of Tennessee, editor of the *Southern Practitioner*, Nashville, Tennessee, writes: "Elixir Six Bromides (W.-G.'se —From a recent and thorough trial of this preparation, we find that it is justly entitled to the claim made for it, 'to rank as one of the most valuable therapeutic agents in quieting non-inflammatory excitement of the reflex centers of the cord of the peripheral afferent nerves, of the genital function and of the cerebrum'. In one case in which it was used—neurasthenia—with nervous irritation following parturition, in which everything else failed, its result was most happy. There was no depression of an already weakened circulation, due to a post-partum hemorrhage; but, on the other hand, it was greatly improved. We have one case of epilepsy. in which it is doing more good than any previous remedy yet used. In other cases its results are good in quieting nervous irritability."

SOUTHERN CALIFORNIA PRACTITIONER.

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ORIGINAL.

HYGIENE.*

BY M. L. MOORE, M. D., LOS ANGELES, CAL.,

PROFESSOR OF OBSTETRICS, COLLEGE OF MEDICINE, OF THE UNIVERSITY OF SOUTHERN CALIFORNIA.

My subject this evening will be *Hygiene*. In a short address I can only call your attention to a few important facts, and if it will lead to a closer investigation of the subject I shall be amply repaid.

Hygiene teaches us how to preserve health, individually and collectively. From the time that the Jewish nation received and accepted the Mosaic laws they were practically exempt from the epidemic diseases that carried death and consternation among the surrounding nations. In fact, their immunity became so striking and apparent that the ignorant and superstitious attributed the cause of their illness to some mysterious influence of the Jews, and when the latter were afflicted in common with those about them, it was because they failed to follow out the instructions that had been given them by Moses. Thus, for several thousands of years the world has had a bright and shining example set before them which time has only confirmed. It is this, a clean city will have entire immunity from local and epidemic diseases that have almost depopulated their unfortunate and less cleanly neighbors; a proof that safety lies in local sanitation and not quarantine, for even though a few cases of cholera and allied diseases may make their appearance in a well-watered—by that I mean water pure and wholesome—well-sewered and well-inspected city, it will never grow into an epidemic; but, if quarantine alone is depended upon to prevent its spread, the people will find that they are leaning on a broken reed and listening to a tinkling cymbal. Quarantine is only an adjunct to local sanitation.

*Address for the Faculty delivered at the Commencement Exercises of the College of Medicine, of the University of Southern California, June 4th, 1895.

Thus, we find that the first duty of the city, state or nation is to supervise the public health, for therein lies their greatest source of wealth. An unerring test of the degree of civilization which has been attained by a country can be measured by its health laws, the intelligence with which they are enforced, the amount of money expended by that department and also by its birth and death ratio. If the death ratio is high and the birth small in proportion to the population, unless compensated by emigration, it is proof positive that there is an exhaustive drain, and unless measures are promptly taken to cure that deplorable state of affairs the end of that nation is not far off. Human hopes, affections and happiness cannot be measured either by the gold or silver standard; nevertheless, it is true that every human being represents, according to its population, just that proportion of the integral wealth of the nation to which he belongs. Intelligence, health and prosperity increase the value of life and represent the sum total of human happiness. Ignorance and disease lessen its money value and stand for the acme of human misery. Statisticians are enabled to arrive at the average value of human life by a comparison with the history of the rise and fall of nations of slavery and other sources, including the value placed by law when death results through negligence of railroad or other corporations. It has been found that the average value in judgments in seventeen states and territories that can be obtained has been shown to be about $7000. In many of the states the jury is limited only by precedent in rendering their verdict. As for example, during slavery days the slave market furnished one criterion. Negro infants brought $200. Able bodied men and women ranged from $1000 to $3000. From these varied sources statisticians have placed the average value of life in an intelligent nation from $1000 to $1500. I am inclined to place it at the latter figure. The infant, helpless and aged are worth less; but, on the other hand, the lives of professional and illustrious men, of inventors, artisans, mechanics and the laboring class are more valuable, and bring the average up to the point designated, even with the criminal and unfortunate creatures weighed in the same balance. Thus it should be plain to even the average legislature that the most important department in public service is the sanitary. And it is as important to the people of this country to have a representative in that department of public service as to have a Secretary of State or Secretary of the Navy. But I regret that the ignorance of legislators and legislation has unfortunately too often relegated it to the rear, unless their attention has been forcibly drawn to it by some frightful epidemic; and then, when compelled by public opinion, it received the attention due its importance only after disastrous loss of life and wealth occurred; but, as Whittier says,

"The hands on the dial move slowly along,
To point out the great contrast of right and wrong."

Thus human lives have been offered up as a sacrifice upon the altars of ignorance and greed and political chicanery.

"As ye sow, so shall ye reap," was exemplified by the scourge that visited Memphis, Tenn., a few years ago. Physicians warned, and requested sufficient appropriations, with authority to expend money to place the city in a sanitary condition against the invasion of a deadly disease. This was months before it made its appearance. Memphis was at that time unsewered and had an impure water supply; in fact the general conditions were filthy from accumulated garbage, the air reeking with the contamination of cesspools and decaying vegetable and animal matter, thereby creating such a condition that the first spark of local or imported epidemic disease could spread like wildfire, and consume all within its reach. The danger from this monstrous sink of impurity, not only to those that dwelt there, but to the country at large, was pointed out to the lawmakers,

but like those of the godless feast of Belshazzar, they failed to read the handwriting on the wall, thereby sending an invitation to the destroying angel who did not delay his coming, for, arrayed in his yellow robes, he entered the city of Memphis, which at that time contained 45,000 inhabitants. Thirty thousand people escaped from this death-trap in one week, and of the 15,000 inhabitants left, 90 per cent were sick, and 4000 deaths occurred, and the fever remained until there was nothing left for it to consume, and Memphis was a vast charnel-house, a helpless victim of a criminal blunder. There was mourning in all of this land for the dreadful calamity which could have been averted. There is a saying "that experience is a fruit only raised in one's own garden," and the lesson that Memphis has received has never been forgotten, for today she is a model city as regards cleanliness. It is a travesty on our intelligence and vaunted justice when the law puts in motion the machinery that compels the city to pay damage to the widow for the death of her husband when due to the negligence of the officials or their employees; when this same corporation carelessly allows some pestilential hole near her dwelling to breed disease, which enters her home, thereby resulting in the loss of her children, no recourse can be obtained by law to point out the disgraceful fact that their deaths were as much the result of negligence upon the part of the city as that of their father, the only difference being the greater crime was against the children, and the law should punish and hold responsible that city for its culpable, guilty negligence. But, one might argue, a law of that kind would open the way for endless litigation for the reason that the scope of sanitation is so vast that it is the warp and woof which weaves the web of our existence, either for health and happiness, or disease and misery, according as we adhere to, or disobey, its injunctions, for it pertains to everything that enters into the human economy, the air we breathe, the liquids we drink, the food that is eaten, our clothing, the soil and vegetation about us, the construction, heating and ventilation of public and private buildings and drainage of our surroundings. Sanitary science teaches us how to prevent preventable diseases, hereditary, as well as those acquired. In fact, Hygiene is the goddess of individual and national prosperity when her wise counsels are listened to. Demography is that portion of the science that gathers vitality statistics, showing the number of births and increase of population from that source, and the number of deaths classified according to the causes which produced them. Practice of medicine and surgery deals with existing diseases and conditions as we find them.

I am fully aware of the apparently insurmountable obstacles that present themselves to the minds of those who are not familiar with this subject, such as the difficulty of passing and enforcing proper health laws, the legal technicalities that will and do arise, the ignorance of the educated and uneducated on these matters, the defining of a nuisance, the question of how far we can go into paternalism, for it enters even into the domain of political economy, for a people cannot be healthy unless the means are provided whereby they can earn a subsistence.

A great deal has been and will be accomplished, and the line of private and public responsibility as regards disease can be as perfectly drawn as when an individual is killed by falling through a defective bridge or an open manhole; simply because one is visible to the naked eye and the other is not, is no excuse, for experience and science have taught us that accumulated garbage, defective sewerage, impure food and water, are the sources from which the greater portions of preventable disease arise. It has also taught us the remedy for those conditions. The microscope and chemical analysis easily reveal impurities in the air, water and food, and every properly governed city should provide as many competent inspectors as are necessary to patrol the entire area, and hold them re-

sponsible for the condition of the wards allotted to them. They should be appointed by civil service commissions, and not be dependent for their positions on some petty ward heeler. They should be amply compensated, and discharged only for incompetency, or neglect of duty, and not for political reasons, and no false "peanut policy" should be allowed to interfere with that department, and the ignorant city official or legislator, who attempts to cripple that most important branch of the community interest by putting forth the cry of economy, which they do for purely political buncombe, mark my words, would be the first to vote himself and confreres sufficient money for a junketing trip upon the slightest flimsy pretext.

Much has been and will be accomplished, for by the combined efforts of sanitarian physicians and surgeons, the expectancy of human life has been doubled within the last two hundred years, and a large share of the credit should be given to the microscopist and pathologist. Smallpox has been transformed from a deadly epidemic into a comparatively harmless disease. Today it would be considered a disgrace and flying in the face of Providence for a city to allow it to become an epidemic, for the remedy is well known to be easily obtained and applied. And now anti-toxine, though in experimental stages, promises an equally favorable change in the character of diphtheria, where, in the past, the average death rate has been fully 50 per cent. If by the past the future can be judged, especially the wonderful progress that has been made within the last century, in all that pertains to the suppression and prevention of preventable disease, there is no doubt but that some one here tonight within the reach of my voice will live to see public opinion crystallized on these matters; that money will be so freely appropriated, and knowledge on this subject so increased that typhoid, diphtheria, scarlet fever and similar diseases will be a very rare thing in a community, and in time will be a thing of the past. Today even, the vengeance of an outraged people should fall on the heads of officials who neglect their duty in this respect. And to the public press a large share of the responsibility falls, for they are to a great extent moulders of public opinion.

As an illustration of the value of careful investigation into the cause that produces sickness, in an individual case, a son of the royal family in England was taken ill with typhoid fever. The first question that naturally arose was, "Where did he contract it?" Now, as the germ of that disease enters the system by drink or food, everything that he had consumed was traced to where the original supply came from and carefully examined. Nothing was discovered until examination revealed the germ in the oysters taken from the same bed that had supplied the royal invalid, and there was found the source of infection, because the bed had become contaminated by the sewerage of the city flowing over it. The government promptly suppressed that dangerous condition of affairs.

Coming home to our fair city, the name and fame of which has spread abroad, as it is the Mecca toward which all are turned, there is no city in the United States today with as great a responsibility as the city of Los Angeles, because she is blessed beyond comparison. The uncontaminated air we breathe is our inheritance from seven thousand miles of ocean waves, situated in the fairest of all fair valleys, and with the natural and artificial drainage that is carried to the ocean, Los Angeles today represents the highest state of human energy, thrift and prosperity. She is a marvelous, living, breathing poem of healthful beauty, and holds her outstretched arms in welcome to the sick and afflicted who come to her from unhealthful and rigorous climes. Nature has been generous to us and lavish with her gifts, but we cannot, without being untrue to ourselves, become careless and negligent, for with the rapidity of our growth we must keep

pace with our sanitary conditions or else suffer the penalty; for man's negligence can pollute the very air of Paradise, and turn the heritage of health into the misery of death. The rapidity of our growth and prosperity almost paralyzes our city officials; yet great credit is due them for the energy displayed in paving of streets, sewerage and various other matters that pertain to health. Still, I wish to point out the fact that at present we need more sanitary inspectors, for only nuisances reported by individuals are abated, and we should have as many well paid experts as is necessary to inspect this entire city from center to circumference, and also to see that only pure foods are placed on the market. Any cheeseparing, nickle-squeezing policy on these matters will injure our fair name and fame, for the thousands of unfortunates who seek health and happiness with us have the right to expect Los Angeles to be the cleanest, the best sewered and watered city in the Union. The sick are a trust that we cannot evade, and our future depends upon the fidelity and care that this department of the public service receives.

In conclusion, there are a few remarks I wish to make concerning a matter that is open to much discussion, but I can only touch upon it in the limited time that has been allotted me, and that is, the duty of the physician to the public and of the public to the physician.

I regret that I cannot enter into minute argumentative explanation of the rights and wrongs on both sides, for they are manifold and very much misunderstood. The physician in the first place should thoroughly qualify himself in order to fill the position which he seeks to occupy, for there is no calling in life's arena that is more honorable and carries with it greater responsibilities than that of the practice of medicine in any and all its branches when honorably and conscientiously pursued; nor is there a more disgraceful act that a man can perpetrate upon his fellow men than to take advantage of this, the highest calling, by forsaking its principles and entering the unholy grounds of empiricism. Of the temptation to do so I will speak later. After having equipped himself, his success will depend largely upon his individuality and the ability and judgment with which the knowledge he possesses is applied. He should be diligent, watchful, progressive, always bearing in mind every case that is placed in his hands is a trust confided to his care, and that an account must be rendered of his stewardship at least between his Maker and himself. He should be kind, courteous, collected and dignified, even under the most adverse circumstances, always bearing in mind that his conduct—private and public—should be such as to reflect credit not only on the profession which he represents, but himself. He should remember the poor and be kind to them, for if he has become rich and successful they have been his stepping stones to prosperity, and he should never forget nor forsake them, and, having once accepted their case, give to it the same attention as to the wealthy.

He should place a proper value upon his services; charge and collect his bills according to business methods. He should not over or under-estimate, for if he values not himself, how can he expect the public to do so? He should be chary of giving gratuitous advice, as in most cases it will neither benefit himself nor those whom he seeks to relieve, for people only prize that which they pay for. It is true that social standing and influence will be an aid to him in securing his practice, but if he has not the ability to prove that he is worthy he will easily fall by the wayside, and will drift out of the profession, as all those that are incompetent should do. On the other hand, the public, after having proved that the physician has qualified himself to administer to their ills, should appreciate his services. When a patient comes in and pays his bill in a cheerful manner

and says: "Doctor, I am glad to be able to discharge my account, and I thank you very much for the kindly interest you have taken in my case during my illness; when I need any more services in your line I shall call on you," it warms up the heart of the tired physician. Such expressions of gratitude are the flowers and sunshine that cheer and brighten the rugged pathway of his too often barren and weary life and lift him out of the depths of despondency which the unthankful ones have plunged him into by their ingratitude.

All serious cases that a conscientious physician has on hand are tangible spectres like Banquos' ghost that "will not down," and are ever present with him. They never desert him, eating, drinking, asleep or awake. They are his boon companions. They haunt his footsteps and are a constant source of fear, tugging at his heart. Too often they deprive him of his much-needed rest. When he lies down they troop before him, one at a time, presenting their various symptoms, demanding his utmost resources in their behalf. How, many and many a time, as every physician can testify, the burden was not removed until the crisis had passed, and then he found himself exhausted, mentally and physically. Too frequently, I regret to say, those anxious, sleepless hours that were spent on behalf of others were repaid by the coin of ingratitude.

It takes greater courage for the physician to enter into the home where malignant disease exists and care for them properly than it does for the soldier to stand up in line of battle, for one does so under the spirit of patriotism and to the sound of martial music and inspired by those about him, while the physician, when he faces death in unseen forms, does so quietly and calmly; and for the reason that in civil life it is of daily occurrence and becomes such a matter of fact, no notice is taken. Many a physician has lost his life in his heroic efforts to stop the spread of some deadly disease, but I have never heard of a pension being paid their widows or orphans.

The public should so far as is consistent with its interest, throw the mantle of charity over his shortcomings, bearing in mind the constant anxiety and sacrifice that he lives, and should discountenance the quacks who advertise their knowledge and ability to cure all ills that human flesh is liable to, as does a circus that advertises on its flaring posters one hundred times more than it performs within its tent. And by that I do not imply that there are no incompetent men in the medical profession; unfortunately, we have them, but they are the exception to the rule. I will admit that this is one of the weak points in our armor, but that is no excuse for the patronage that the public gives to the self vaunted vultures that prey upon the unfortunates.

It is also with greater reluctance that I admit that we have within our profession in good standing, men that are prone to a mild form of this disease of advertising. It manifests itself in lauding themselves upon every occasion that affords them the slightest pretext, and their method of obtaining business is full of "hair triggers," such as bobbing up at all public gatherings, banquets, etc., magnifying the importance and difficulty of operations, major and minor, which they perform, and thus from the apparent pinnacle which they occupy, condemn in others what they blindly condone in themselves. Fortunately, it is very rare that this class of advertising ever manifests itself in a severe and malignant type. A hint to the wise is sufficient.

The medical profession as a rule, are prone to treat charlatanism of all kinds with silent contempt, knowing full well that it opens up a field for a vast difference of opinion. They also have a disinclination to enter into a discussion of this subject which is fraught with such interest to the general public. For this class, as soon as attacked and exposed, are thrown into a paroxysm of frenzy, and in-

trenched behind their testimonials, and pictures of "before and after taking" with their usual ingenious sophistry and "catch penny" phrases, go far toward making up a case of injured innocence, and posing as public benefactors on their part, claiming persecution and jealousy on the part of the medical profession. These men are shrewd, and good judges of human nature which enable them to take advantage and unjustly thrive upon the misfortunes of mankind. Too well they know the value of an advertisement. By these means they have not only obtained a firm hold upon the confidence of a portion of the masses, but on the press, as well, into whose coffers they pay enormous sums of money every year, and thus by this tribute they escape the just condemnation and censure that their damnable, outrageous, lying statements deserve. Knowing the abominable fraud, deceit and hypocrisy, which these wolves in sheep's garments perpetrate on the people, I have more respect for a highway robber who stands in a blind alley waiting patiently with weapon in hand, ready to strike down his victim and rob him while he is unconscious, than I have for this class of public sand-baggers, the advertising charlatans and quacks, under whatever guise they make their appearance, for their name is legion, and their ways are dark and devious. I am perfectly willing that their wrath and indignation should be visited upon my head, for to secure their enmity is an honor, but their friendship is a reproach.

Who are to blame for the existence of this class of vampires and blood-suckers, who hold out mythical allurements to unsuspecting victims? It is the law, and those who patronize them; and I wish to speak of the temptations that are often placed before the honest physician to join their ranks. Finding although he has the ability, that his honest and modest efforts to obtain a lucrative practice by methods that leave him self-respect, result in failure, the practical bread and butter things of life not only confront him, but his little family, and poverty appears to be their portion; after his having spent years in preparing himself for the practice of medicine, he sees a man known to him to possess little if any medical knowledge, piling up this world's goods through the wording of advertisements, agreeing to cure all ills, real or imaginary, knowing at the same time that his ability is an amalgamation of pure unadulterated cussedness and bombast. He argues that being competent to treat all diseases, he will just start in and see if he cannot secure business by the same method, and is very much surprised at his success. Another good man gone wrong, that otherwise would have been a credit to the profession that he stands for because manufactured references and statements are taken for truth and wisdom,while the possession of modesty and ability is taken for ignorance; once the step is taken, it cannot be retraced. The deception must be kept up, and added to with all the ingenuity that humanity can invent, and soon he is lost to all sense of manhood and honor. Every man in the profession should avoid that line of conduct as he would a viper, for though the pecuniary result may be profitable, in the end he will find that it is at the expense of self-respect. Above all things he should keep his private and professional honor unsullied, and before and after the battle of life is finished, there will be found nothing but the scars of honorable warfare on his shield, and there will be naught to tarnish his good name.

I do not wish the public to misunderstand me in this matter; I hope my conduct and position in this community will relieve me from the charge of any selfish and personal motive. I am not here to deny the right of any man, or set of men, to their honest opinion, no matter how it differs from mine. Neither do I wish to constitute myself judge and jury. It is true that physicians do not always agree. Neither do they always give entire satisfaction to their patrons, and many times they wrangle among themselves. Neither have they the ability to

please every one, for that is a human impossibility. It is not my province or desire to abridge the rights of others, but, in the name of Heaven, common humanity and decency, I beseech you when you do make a change, let it be to one that can show that he has at least made an effort to prepare himself to treat your case, even though he may differ as regards schools of medicine; but do not go to the man who claims there is no limit to his capacity, and works the Indian doctor, the heathen Chinese and various other fakes too numerous to mention.

Bradbury Block.

SOME AFFECTIONS OF THE LUMBO-ABDOMINAL NERVES.

BY NORMAN BRIDGE, A. M., M. D.,
PROFESSOR OF CLINICAL MEDICINE AND PHYSICAL DIAGNOSIS, RUSH MEDICAL COLLEGE.

A number of cases have come under my observation of a most unusual character of suffering in the urinary apparatus and the lower intestine, that are difficult of explanation. The pain was in each case paroxysmal, often intense, sometimes attended with vesical or rectal tenesmus, but usually not, and always suggested the presence, as a cause, of some severe inflammatory trouble or a neoplasm, neither of which could be demonstrated by the most thorough and painstaking search.

CASE I. Mrs. X., aet. 60, mother of three children, had been for several years a dyspeptic of a mild type. Paroxysms of intense pain came on suddenly, apparently without cause, and were repeated once or more times daily for many weeks; with often more or less continuous pain in the intervals. The location of the pain was the rectum, the vulva, urethra, vagina and the body of the perineum; sometimes she would locate the suffering at one of these points, sometimes at another; at still other times she would say the pain was diffused over a considerable area in the region named. In character the suffering was a sudden seizure of intense pain which would last from several minutes to an hour or more, when it would pass off slowly, often leaving a sore, slightly painful feeling; yet there was never any tenderness except during the paroxysm, and very little then. An evacuation of the bowel or bladder would at times seem to provoke a seizure, at others it had no effect.

Repeated careful manual examinations failed to reveal any even trifling lesion to account for the case. Examination of the urine was negative. The trouble was aggravated by overeating, indigestion, constipation or diarrhea. Slight benefit resulted from a strict regimen, gentle laxatives and mild diuretics. Powerful anodynes were called for at times. There was no fever at any time. Appetite was fair, and there was only slight loss of weight. After two or three months the trouble slowly passed off without further revelation as to the etiology, and the recovery has been permanent for about eight years, during which time the general health has been good.

CASE II. Mrs. A., aet. 62, the mother of several children, a thin, but very healthy person till the beginning of this sickness, found three years ago that pain occurred in the urethra, especially after micturition. It would last but a minute or two usually at first, but before long grew worse and would last longer and occur between the acts of urination. The character of the suffering has in

*Read at the fifteenth semi-annual meeting of the Southern California Medical Society held at Los Angeles and Catalina, July 5 and 6, 1895.

nearly every particular closely resembled that of Case I; one of the exceptions is the almost constant location of the pain in the urethra, or neck of the bladder. The pain has been aggravated by indigestion, by the act of eating, by diarrhea, by irritation of the bowels, and by any irritation of the bladder. Occasionally, early, there was a mucous stool with a staining of blood, after which the pain would be worse, and it was suspected that some malignant or other inflammation of the lower part of the colon (there was found no lesion in the rectum) was responsible for the seizures; but months ago this symptom mostly recovered; it has returned from time to time in slighter degree, or, rather, the mucus, not the blood. At times there has been a slight catarrh of the bladder, and medication of it has seemed to help the case, but after it has completely recovered, the paroxysms have returned. But the vesical catarrh has returned again and again, and is present now to a moderate degree, although there is an absence of mucus a part of the time, yet she urinates too frequently. A curious circumstance is that the mucus seems to come from the bladder in one mass wholly unmixed with the urine. Several manual examinations made at variable periods during the first year and a half failed to reveal any sufficient explanation of the suffering. It must be said, however, that there was marked hyperesthesia of the vagina and urethra, and any examination of these parts caused intense suffering. There was no disease of the kidneys.

Medication had little influence over the case; rest in the horizontal position was beneficial. The patient is now better, but has not recovered; she still has the pain more or less. She has a fair appetite, has never lost much weight, and has now nearly regained all she lost, she has never had fever and is not cachectic. She declares that there has never been a day for two years when she could eat a large meal without provoking a paroxysm of suffering in the urethra within fifteen minutes, but she has learned that if before a meal she takes a cupful of hot water with a few drops of essence of peppermint and about ten grains of bicarbonate of sodium, she is much less likely to have a severe paroxysm, but does not escape one entirely. As a result of this gastric sensitiveness she has for a long time avoided eating large meals, but takes instead five or more small ones a day.

Case III. Man, about the middle period of life, healthy in the main, has occasional attacks of gastric indigestion and an occasional diarrhea lasting a few hours or days. He formerly was a migraine subject. In the last five years he has had, following a diarrhea in each instance, several attacks of what has appeared to be intense rectal congestion and catarrh. Mucoid passages occur, and the swelling of the mucous membrane of the rectum is so extreme as to give a sense of intense fullness, aggravated at times by pain on sitting down. Great pain is experienced in the transmission through the rectum of fecal matter, and the pain through the mass when the viscus is quiescent is at times so extreme as to suggest the presence of something more than a proctitis. No fever ever occurs. There is little loss of weight or appetite.

After continuing for one to three weeks, the trouble may disappear in twenty-four hours and not recur for a year perhaps. The man has been free from it for a year past and is well.

No treatment seems to do much good. Perhaps the most useful is an injection of a solution of nitrate of silver, but the benefit is short lived and the pain from the injection is worse than that of the disease.

Case IV. Boy, aet. 14, healthy and vigorous, but with rather sensitive digestive organs. Had one season several attacks of the most intense itching and tingling in the skin of the pubic region and of the scrotum. When the attack came on he was quite powerless to resist scratching or tearing at the parts. It

would occur two or three times a day, and last from a few minutes to an hour. There was no rash or other abnormality of the skin. He observed that at about the times of the attacks he had marked intestinal flatulence, and that the best remedy was a free evacuation of the bowels. Whenever this could be accomplished the symptoms disappeared promptly.

Malignant diseases of the bladder or urethra, or of the rectum or sigmoid flexure of the colon, are usually attended with more or less severe suffering. As these organs are viscera of the body for the accumulation of excrementitious substances that must be evacuated at intervals by complicated muscular movements, it is rational to see in these acts cause for paroxysms of pain. All lesions that involve muscular tissue must cause pain at the time of its contraction. Of course, severe irritation or inflammatory lesions of any of the organs of the abdomen may cause pain of various degrees of severity and of variable character. Malignant disease of any of the organs of the abdomen may cause frequent paroxysmal and often at times nearly steady pain.

Poisons in the blood cause at times severe pain in the abdomen, as of other parts. For example, lead and malaria. Inflammation of the nerves themselves may cause pain for a protracted period, but it is not, I believe, demonstrated that neuritis may seize the abdominal nerves alone. Tabes may cause a form of abdominal pain. One of the severest forms of pain is that known as reflex; that which is due to irritation of some organ distant from the seat of pain. Headache due to indigestion is one of the most marked examples, while the migraine habit is often an ideal example of a periodical severe pain due either to some undiscovered reflex irritation or to some cerebral or nervous defect that exposes the parts to periodical suffering from the effect of the normal environment.

The intimate relation of the digestive organs and the function of digestion with migraines (whence they are called sick-headaches) shows the susceptibility of the abdominal nerves to attacks of disturbed function and sensation without any structural disease, and saying this I do not forget that the pneumogastric nerve is not one of the nerves of the abdomen. The nerves of the abdomen proper are more or less involved in the migraine phenomena as shown in the digestive disturbances of this disease, the diarrhoas that accompany or follow the attacks, and in the various erratic sensations and experiences of the abdomen that are convertible with the attacks of pain. It is a fact that regularly recurring seizures of migraine do become converted into attacks of various other nervous or muscular perturbations. An ideal migraine may become a recurring diarrhea or muscular neuralgia, or prolonged spasm not unlike some of those that characterize hysteria, and which last weeks and months. Or a migraine occurring for years with marked regularity and with no ocular disturbance whatever, may gradually change, the pain being omitted entirely and the most marked eye disturbances of migraine taking its place.

In the cases named, the pain and dysesthesia would seem to have been caused by different influences. In Case 4 the cause of the itching and tingling must have been a reflex one in some worriment of the intestine due to constipation, or to the absorption of some ptomaine from the mucous membrane which the free catharsis stopped. In Case 3 the rectal congestion was most undoubtedly due to the influence that earlier in the life of the patient caused the migraine. It was one of the many conditions of this diathesis. As to Case 2, we should perhaps speak with less positiveness, as the patient has not yet recovered; but Case 1 recovered completely, so the cause of the pain must have been some reflex irritation. Just what it was and where it was located are to me so far a mystery. The interesting thing is that we know the reflex irritation was not a neoplasm of a

malignant character at least, nor one that could be discovered by any of the means resorted to.

I think the following conclusions are justifiable:

1. A certain sort of irritation in the lower bowel can cause by reflex action intense suffering in distant parts e. g., urethra and perineum, as shown in Cases 1 and 2; and the scrotum, as shown by Case 4.

2. Irritation of other parts of the alimentary canal e. g., the stomach, may provoke attacks of severe pain in the perineum and elsewhere when the habit of such paroxysms has been established by other irritations.

Los Angeles.

VAGINAL FIXATION IN THE TREATMENT OF RETRO-DISPLACEMENT OF THE UTERUS. *

BY J. H. DAVISSON, M.D., LOS ANGELES, CAL.
PRESIDENT OF STATE BOARD OF HEALTH.

Report of a case of Retroversion of twelve years' duration corrected by Vaginal Fixation.

In a most clever paper before the American Association of Obstetricians and Gynecologists at Toronto, September 19th, 1894, Dr. Clinton Cushing, of San Francisco, California, correctly condemns as ineffectual and hazardous all procedures hitherto in use for permanently correcting chronic retro-displacements of the uterus, and regards with favor Mackenrodt's operation or vaginal fixation, as demonstrated to him at Martin's Clinic in Berlin in 1893.

Cushing says: "As far as keeping the uterus in its normal position is concerned, and thereby relieving the disagreeable symptoms, I have successfully treated many hundred women with the various modifications of the Hodge pessary. Many of these women have been under observation for from three to six years, and at the end of from two to three years the pessary has been removed as an experiment, to determine if the uterus would retain its normal position without artificial support. Certainly not five per cent. remain normal after removal of the pessary. In all cases the pelvic floor has been repaired where the woman has suffered injury to the part. The vaginal pessary then, in the treatment of retro-displacements of the uterus, must be placed in the category with wooden legs, spectacles and ear trumpets; mainly as an aid to render life more tolerable and comfortable and not as a means for permanent cure."

I am in accord with his views *in toto*, and believe the same opinion is shared by a large majority present. He likewise records the failure of Alexander's operation and wisely regards ventral fixation as too hazardous for retro-displacement *per se*.

As the operation of vaginal fixation is new in this country, and believing many present have not seen Cushing's brochure, I will give you the operation in his own words: "The woman is placed in the lithotomy position at the edge of the table, a Sims' speculum introduced, the perineum retracted and the cervix drawn down to the vulva. A strong uterine sound is introduced into the uterus, and the organ held by an assistant in a position of anterversion. An incision is made with a knife directly forward in the middle line from the cervix toward the urethra for two inches, the incision extending only through the vaginal tissues. The vagina is separated from the bladder on either side of the incision for half an inch, and the bladder is then pushed off the anterior wall of the uterus up to the peritoneal reflexion. This part of the operation is much facilitated by seizing the

* Read before the Southern California Medical Society, December 6th, 1894.

anterior wall of the uterus with bullet forceps, drawing it down and steadying it. The bladder is then easily pushed upward and forward out of the way, a suture of silkworm gut is introduced through the muscular wall of the vagina on one side of the incision, an inch and a half from the cervix, then through the anterior wall of the uterus, and out through the muscular wall of the vagina on the opposite side. The ligature is then tied and buried. A second suture is introduced in like form a half inch lower down, and the incision in the vagina closed throughout with silkworm gut. The result is that the anterior wall of the uterus is drawn over and fastened to the anterior wall of the vagina, the bladder being pushed upward and forward."

Dr. Cushing reported twelve cases operated upon by him since returning from Berlin, all of which were as yet successful.

An essential condition for the operation is absence of adhesions, best determined by keeping the uterus in a condition of anteversion for a few weeks before operating. The operation is indicated in both versions and flexions, and contra-indicated in cases of adhesions and very large and heavy uteri.

In most cases curettage is indicated for endometritis, this should precede fixation, likewise trachelorrhaphy when indicated and fixation should be immediately followed by perineorrhaphy in cases of lacerations. Although Dr. Cushing commends the operation for its simplicity I regard it as rather difficult. The right and left perineum needles (Peaslee) are best for passing the sutures or Hagedorn needles may be used with care.

There is but little pain or reaction after the operation and it it is only necessary for the patient to remain in bed a couple of weeks, but Cushing advises the use of a small Hodge pessary for three months after the operation, as a precautionary measure to relieve the tension of the buried sutures until the adhesions are firm.

CASE:—Mrs. W., aet. 32 years, widow, nullipara, retroversion of twelve years' duration with chronic endometritis and consequent profuse purulent discharge. I had tried in vain to permanently correct the displacement and its accompanying ills by a year's treatment, but as soon as the Hodge pessary was removed the uterus would become retroverted and congested and the discharge would return. October 21st, assisted by Drs. Lasher, Cowles, Hitchcock and Bullard, after a thorough curretting, vaginal fixation was done. The patient remained in bed; the bowels were moved by enemata every second day; used carbolized douche, followed with iodoform gauze, after the third day. Introduced Hodge pessary the thirteenth day and the patient left the hospital on the fourteenth day feeling quite well. Now, more than six weeks after the operation, the uterus is high up and well forward, and the result is in every way satisfactory. There is a future for this operation, and as pregnancy and delivery at term have occurred without accident in a number of cases of ventral fixation (report N. Y. Obst. Soc., Pacific Med. Journal, Nov.) I can not see why there should be serious interference with that function in anterior vaginal fixation for retro-displacement of the uterus.

Byrne Block.

CEREBRAL SYPHILIS.

BY F. D. BULLARD, A.M., M.D., LOS ANGELES, CAL.,
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Sachs, of the New York Polyclinic, in his article, "Syphilis of the Nervous System," in Vol. 2 of Morrow's Genito-Urinary Diseases, Syphilology and Dermatol-

*Read before the fifteenth semi-annual meeting of the Southern California Medical Society, held in Los Angeles June 5 and 6, 1895.

ogy, makes the the following statement: "My own experience has impressed several points upon me. First, that those who acquire syphilis when comparatively young (say under twenty-five) are more apt to develop cerebro-spinal syphilis; secondly, that in such subjects syphilitic nervous disease is apt to appear within two or three years after the initial infection; and, lastly, I have been convinced—rather against my former views of the duality of the syphilitic lesion—that syphilis of the nervous system appears not infrequently after soft chancres without the customary secondary eruptions." He also noticed in cerebral syphilis persistent headache, variability of the symptoms and often a previous involvement of the spinal cord.

Collins, in the May number of the *Journal of Cutaneous and Genito-Urinary Diseases*, sums up the pathology of cerebral syphilis thus:

(*a*) Vascular. An arteritis blocking up the lumen of the vessel and thus causing thrombosis apoplexy.

(*b*) Gummatous. From the meninges, causing secondary symptoms from pressure on blood vessels or nerves.

(*c*) Diffuse. Producing a proliferation of round cells about arteries and into connective tissues forming leptomeningitis or pachymeningitis.

In looking over notes of cases, I came across one that so fittingly illustrates these observations that I think it worthy of recital:

In October, 1892, N. S., aged 24, clerk, consulted me on account of a growing inability to walk, ptosis of the right lid and paralysis of the left side of the face. He gave the following history: He had lived a tolerably virtuous life, but had deliberately departed therefrom on one occasion three years previously. Knowing the danger of the byways of sin, he essayed to make sure of all his steps. He not only chose an inmate of one of the most fashionable houses, but had a careful examination as to her physical condition made by one of the best known surgeons in this city. The doctor pronounced her healthy. Although he took every precaution as to cleanliness, in about a week he had three soft chancres—at least, they were so called by a good diagnostician. Another examination of the demi-monde was immediately made, but she was apparently healthy; nor, as far as could be learned, had any of her previous or subsequent visitors contracted disease from her. The chancroids yielded quite readily to treatment, and their very existence would have been forgotten had not later events given them a sinister character. The first intimation of any constitutional involvement was a troublesome headache two years later, for which he consulted an oculist, who, finding some defect in vision, prescribed glasses, without any benefit however. Suspecting syphilis, he made diligent inquiries as to infection, eruptions, etc., and put the patient on iodide of potassium, which afforded prompt relief. The oculist did not reveal his opinion to the patient as to the nature of the trouble, but advised him to report at once if anything went wrong. There was then no history of eruptions, save two so-called boils which the patient had excised. In my examination of the case I elicited the fact that one year after the initial lesion the patient had a scaly eruption, bleeding on removal of the scales, on the palms of the hands. This was all the eruption of which the patient, who was a very fastidious young man, had any recollection. With these data at hand it was possible, about three months before I saw him, to have correctly diagnosed the dangerous conditions which then arose. He was troubled with headache, vomiting, pain in the chest, girdle sensation and tenderness over the pit of the stomach. A little pill doctor, taking into consideration only the condition then present, diagnosed gastritis, and persistently treated him therefor, scouting the idea of some of the family who thought something else might be the matter.

Although for some months there was a growing inability to walk, not until there was a marked involvement of the right eye lid and left side of the face did the patient become frightened and come to Los Angeles for treatment. The immediate cause of his alarm was the discovery that he could not whistle. The finer movements of the hand were interfered with, as he was unable to play on the piano. He practically had had no treatment other than antikamnia for pain. After a careful examination of the history and present condition, I made a diagnosis of syphilis and so told the patient, basing my opinion on the following grounds: Initial lesion, even though called chancroids; syphilitic psoriasis of the palms one year later; headaches, relieved by iodides two years later; spinal involvement three months previous; and, lastly, the very characteristic symptom then present of multiple cranial nerve palsies.

On examination I found the following conditions: Paralysis of the left seventh cranial, also of the right motor oculi. These symptoms could alone be produced by multiple lesions, for the left seventh and the right third are so far apart that no one lesion such as a large basal gumma could cover them without involving at least the left abducens. The trouble was neither intramedullary, else the sixth nerve would be involved; nor pontine, as it would then likely cause a hemiplegia. As there was no headache to speak of at that time, the conclusion was reached that several small gummata were producing these symptoms by pressure on the respective nerves, rather than a basal diffuse syphilitic infiltration. Both pupils were enlarged, the right much the more so, and immovable.

The ataxia, loss of knee jerks, partial paraplegia with paresthesia of both feet and anesthesia of the left great toe, I attributed to a diffuse, spinal, meningeal infiltration—the girdle sensation and sharp pain showing the patient had suffered from a meningo-myelitis. The loss of the finer movements in both hands as well as paresthesia of the right thumb was doubtless due to a diffuse specific trouble higher in the cord.

Vigorous treatment was at once instituted. Iodide of potassium, thirty grains to a dose, was given four times a day. This was rapidly pushed until within two weeks the patient was taking an ounce a day. Mercurial inunctions were also used daily. The patient ate four meals a day, and kept his mouth clean with a wash of chlorate of potassium. The maximum dose was sustained for a week, a few days' absolute rest given, and the amount run up to a daily dosage of 380 grains; then the same process was repeated with a lower limit, and so on. At the end of the first round, improvement was noticed; at the completion of the third, recovery from all facial trouble and almost an entire restoration of the power to use the limbs was noted. The patient was able to walk without a cane, with, however, a perceptible "waddle." The patient continued slowly to improve, and was advised to keep up the "off and on" iodide treatment for a year, and was dismissed for the time being, cured.

Business during the crash of 1893 was so pressing that the patient omitted all treatment for two months, and in July I was again summoned to see him. I found the family much alarmed. It appeared that the day before (Saturday) he had worked very hard. On rising Sunday morning he noticed a peculiar sensation in his right leg, and was helped down stairs to breakfast; on arising from the table he walked with difficulty, and discovered that his right hand and the right side of his face were partially paralyzed. In thirty-six hours the paralysis was complete—a typical hemiplegia. There was no loss of consciousness, hence a hemorrhage was out of the question.

So sudden an onset, and so large an involvement, indicated a vascular trouble of the nature of an obliterating endarteritis either arising within the artery *ab initio*

or caused by a growth pressing upon the outside. The left sylvian or its motor branches were the affected vessels.

Such being the probabilities there was evidently great danger of permanent occlusion, and speedy death from abscess formation; so the iodides were still more vigorously pushed, reaching the ounce limit within a week. Improvement began to take place in forty-eight hours after the commencement of the treatment. A similar up and down dosage was ordered, as during the first attack. Six weeks showed apparently an almost perfect recovery, though there still lingered slight ataxia from the former spell. Of the subsequent history of the patient I know nothing. He quite likely will employ some one else if he again finds himself in the toils of this protean monster. His future I regard as doubtful, locomotor ataxia is quite probable and general paresis possible.

So uncertain is the outlook for cerebral syphilis that Gowers says: "There is no real evidence to show that the disease ever is or ever has been cured." On the other hand, the experience of many is that it is the organic nervous disease most amenable to medical treatment, for its present manifestations frequently succumb to the mighty iodide. It is its future action that is unknown. Syphilis is undoubtedly a microbial disease, and as such obtains its virulency from toxic action, so it has been suggested that the late manifestations of syphilis are the results of toxines—the degenerative changes of ataxia and paresis occurring *ab initio* rather than being post inflammatory. From 5 to 25 per cent. of syphilitics show late manifestations, and fully 50 per cent. of tabetics and general paretics are undoubtedly syphilitic—so it is even questioned if these diseases do not form a fourth stage of syphilis.

The dermatologist has a far rosier view of this disease. Says P. H. Fox: "If properly treated it is one of the most eminently curable diseases." Both Gowers and Fox cannot be right, and it seems to me both are wrong. The cured syphilitic of the dermatologist turns up years later a sick man on the hands of the general physician or neurologist. Yet as three-fourths of the cases are so far cured as to have no later manifestations, it is not a hopeless disease, and on the other hand it is a very grave malady which so often has a living death as its ultimatum for its victim, and ruined health for his offspring.

We would sum up the case according to Sach's observation, thus: A young man, under 25 years of age, had, following chancroids, with practically no secondary symptoms, within three years cerebro-spinal syphilis; he suffered from persistent headache, and had cerebral with an earlier spinal involvement. According to Collins' summary he had an obliterating arteritis in the last attack, gummatous in the first attack that I saw him, with probable meningo-myelitis and pachymenigitis from diffuse proliferation before he came under my observation.

The lessons are: Watch closely all nervous manifestations, especially persistent headaches in young adults, and if syphilis be present, push the iodides. The stomach of the syphilitic will usually bear enormous doses of this drug if it is given well diluted after meals.

701½ South Broadway.

CARDIAC STIMULATION. Dr. J. H. Kellogg—The application of heat over the heart, and application of hot and cold water to the spine in rapid alternation, are a much more effectivem eans of arousing the heart to activity than the administration of alcohol.

SYMPTOMS AND TREATMENT OF INSUFFICIENCY OF THE ORBITAL MUSCLES.*

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The term asthenopia, according to its derivation, means weak power of sight, but Donders describes it as a peculiar condition consisting of more or less inability to use the eyes continuously for close work without the occurrence of one or more of the following symptoms: fatigue; a strained feeling in and above the eyes, sometimes amounting to absolute pain; blurring of the sight so that all objects appear indistinct; blepharospasm, lachrymation, photophobia, nausea and even vomiting and vertigo. To these should be added headache, either frontal, temporal, occipital or general. There is not necessarily any organic disease of the eyes, and the cause is usually to be found in an error of refraction, generally hypermetropia or astigmatism. This has been called Accommodative Asthenopia, because other conditions will produce the same line of symptoms. For instance: irritation of the nasal mucous membrane, hyperesthesia and irritability of the retina, and inherent weakness of the extrinsic muscles of the eyes. There can be no doubt that the great bulk of asthenopia is accommodative in its origin; but insufficiency of the external muscles is another prolific cause of the symptoms mentioned before. Asthenopia, due to reflexes from the nasal mucous membrane, or irritable retinæ, is, I believe, comparatively rare.

How are we to distinguish the muscular from the accommodative? Primarily is it necessary to make a distinction? I think not, for in any given case of asthenopia our first care is to measure the refraction and test the muscles. If we find both at fault we should correct the refraction before treating the insufficiency, and very frequently, unless the insufficiency amounts to more than 2°, the correction of the error of refraction will relieve the asthenopia, and the question is settled. Too frequently, however, the question of muscular balance is taken no account of whatever, and this one fact I believe to be at the bottom of the great majority of our unsatisfactory refraction cases.

Granting that we have corrected the refraction of a given case and the symptoms still remain, or that we have a patient with insufficiency only, we then may be reasonably sure that the cause is muscular, and the question arises: "What shall we do?"

Let us briefly review the imperfect muscular conditions that may exist. Using the nomenclature of Stevens, we may have insufficiency of the external muscles, Esophoria; insufficiency of the internal recti muscles, Exophoria; tendency of one visual line above the other, Hyperphoria. This latter may exist with either Eso or Exophoria, giving us Hypereso or Hyperexophoria. Any of these conditions may occur in individuals who are otherwise strong and vigorous, but are more frequently found in those whose general health is impaired and whose nervous mechanism is out of repair.

The subjective symptoms do not differ materially from those produced by errors of refraction alone. They are, pains in the eyes on using them for any near work, and occasionally in fixing distant objects; this pain is frequently accompanied by headache, which may be fronto-temporal, occipital, vertical or general, and Noyes says that not a small percentage of sick headaches originate in disorders of the ocular muscles. There may be photophobia in varying degrees and blurring of print due to the tendency to diplopia, and occasionally dizziness.

*Read before the State Medical Society at San Francisco, April 18, 1895.

If the patient be a neurasthenic or greatly run down from some prostrating disease, such as diphtheria, typhoid fever, la grippe or allied troubles, there may be a train of symptoms taking in all the aches and pains that flesh is heir to, including the functional nervous disorders, epilepsy, chorea, etc.

It is upon the objective symptoms that we must depend for our positive diagnosis of muscular errors. Having corrected the refractive error we should first look into the muscular condition without calling the muscle of accommodation into action. Placing a small flame 6 meters from the patient we may at once measure abduction, using Gould's Prism Battery. Place prisms bases in, in front of each eye, beginning with prisms of 1° strength; increase by 1° till the candle becomes double; should this occur before the total is 6° we will probably find some error. For adduction place the prisms with bases out before the eyes, and by increasing the prisms over each eye one degree each move till the candle becomes double, we may quickly obtain the desired information. Adduction may normally be anywhere from 30° to 60°. The ratio should be 1° of abduction to 6° or 7° of adduction.

Place a prism of 7° in trial frames base down over right eye. Two flames should at once appear, one perpendicularly above the other; if the upper flame, which is the image seen by the right eye, be to the right as well as above, the images are homonymous, and we have weakness of the externi or abductors, that is esophoria. If the upper image be to the left we call the images heteronymous, which indicate exophoria; that is, weakness of the adductors, the internal recti muscles.

To examine the superior and inferior recti muscles darken the room and use a 10°, 15° or 20° prism base in before the right eye. If the two images be not on the same horizontal plane we have an error in one of the eyes; which eye a patient examination will reveal.

We may now bring accommodation into use and measure the muscular action at working distance. Use a prism of 10° base down in right eye of trial frames or holder and look at dot on a line at a distance of 12 to 18 inches. Ordinarily we will find homonymous images 5° apart, but pay no attention to them; but if more, the condition needs treatment. Heteronymous images are always indicative of error and usually of the externi.

Having found the muscular insufficiency, what shall we do? Dr. St. John Roosa in his late work on Diseases of the Eye, says that although he formerly believed that asthenopia migh be dependent upon insufficiencies of the external ocular muscles, he has finally come to reject it altogether. He recognizes the insufficiencies, but says they are dependent on static fixed conditions of the eyeballs, and therefore it is not necessary to measure the relative power of the muscles. "It may be interesting, but it can do nothing toward a proper treatment."

In another place he says: "If the student will carefully correct the errors of refraction, he will have no need for tenotomies except for strabismus, nor for prisms except for paresis or paralysis of the external muscles." And to aid a logical conclusion to his dicta he says: "When we correct strabismus we are always content with removing the manifest deformity dependent upon insufficiency of the muscles. We never cut and cut again for insufficiency of the muscles that the phorometer may declare. If those who advocate tenotomies for latent insufficiencies are right, they ought by all the laws of logical deduction to continue their operations here also, until muscular equilibrium has been reached. But all practitioners are, I believe, content with glasses to preserve the equilibrium of the eye and maintain the result of the operation, to-wit., parallelism. This is what I advocate for muscular insufficiencies or weakness due to the errors

of refraction." From these quotations we must conclude that Dr. Roosa does not believe in asthenopia due to muscular inequilibrium, and, furthermore, no muscular insufficiency short of manifest strabismus should be interfered with beyond correcting any error of refraction that may exist.

Dr. Ernest Fuchs says: "Only those cases of insufficiencies which cause trouble or threaten to pass into strabismus call for assistance." Insufficiency of the interni require consideration mainly, and this may be assisted by prisms, before each eye bases in. For insufficiency requiring more than 6° prisms, tenotomy of the stronger muscles is indicated.

Dr. Geo. A. Berry does not even indicate a line of treatment, but rather leaves us to conclude that nothing is to be done till the latent becomes manifest squint.

If however we believe in the treatment at all, our first aim should be to put our patient in the best physical and mental condition possible, the refraction having been carefully corrected, we must stimulate the weak muscles, or quiet the excessive action or spasm of opposing muscles. Dr. Henry D. Noyes recommends a mode of invigorating the eye muscles which is especially suited to cases where all the muscles are feeble. The patient is provided with square prisms of 2½°, two of 5°, two of 10° and one of 15° and placed six meters from a candle flame. He begins adducting by placing the 5° prism, base out, before one eye, substitutes the 10° degree prism, then he places the 5° prism, base out, before the other eye, and substitutes for it the other prism of 10°. He may climb further by adding the 2½° prism and then substituting the prism of 15° and so on till he adducts the full amount of 42½°. The patient may in the same manner give his abducting muscles gymnastics, the only difference being that the prisms will be placed before the eyes bases in, and he or she will probably not be able to overcome more than 10°. These gymnastics should be carried out twice daily, ten minutes each time for several months.

Whenever abduction at 6 meters is as low as 5°, prisms, bases outward, may be prescribed for constant use, and Noyes adds, that his conclusion from recent experience is strongly in favor of the helpfulness of weak prisms continuously worn, for moderate degrees of muscular error, and they have in his practice largely taken the place of gymnastic prisms. He formulates his rule for prescribing prisms as follows: " The base should be placed toward the image whose position is to be corrected, and this corresponds to the weak muscle, provided the physiological or functional action of the muscle is regarded. The apex of the prism, like a knife edge, indicates the muscle which should be weakened, and the base denotes the muscle to be strengthened.

Dr. Geo. T. Stephens says about as follows: "Adduction may be greatly improved by gymnastic exercises of the interni by means of prisms. A prism of say 10° base out is placed before one eye while looking at a candle at 6 meters, when an effort is at once made to prevent diplopia. As soon as the images are blended, another prism, of perhaps less degree, is added. The images being united, a stronger prism takes the place of one of those already in use. Thus, little by little, the eyes are required to overcome prisms until the images can no longer be united. All the prisms are then removed and the process repeated, with probably a slight gain each time. This exercise should not last longer than six minutes nor be repeated more frequently than once daily. This is practically the method advocated by Noyes, which I called your attention to a moment ago."

Dr. Charles E. Michel develops weak interni in the following manner: Beginning with a 1° prism base in before the eye, he has the patient look at an object 6 meters away for four or 5 minutes, ten to fifteen times daily at first, later four or five times daily, but increasing the time of exercise by two to five minutes

daily, and increasing the strength of the glass till 4° prisms are in use and can be worn with comfort, looking at a distance for one hour. Then the patient is instructed to read at first three to five minutes, increasing the time by two to five minutes daily until he can read comfortably one hour, four times daily. This exercise is kept up several months for half to one hour, three times daily.

Dr. G. C. Savage has a method which he calls Rhythmic Exercises, and which he considers useful only in cases where the heterophoria is less than 7°. In exophoria, where the internal recti are weak, the Rhythmic Exercises may be utilized by using a lighted taper held at arm's length in front of, and on a plane with, the eyes, fixing the vision on it strongly, bringing it to within 12 centimeters of the eyes and holding it there two seconds, then closing the eyes for a moment and on opening them directing the vision to a candle 6 meters away; the process to be repeated five to ten times at one sitting, and having two or three sittings a day for several months.

The same object may be attained by using prisms, bases out before each eye. One degree prisms should first be used, substituting stronger prisms as the muscles grow stronger. The candle is placed 6 meters away, and the patient looks through prisms five seconds; they are then lifted for five seconds, then replaced, then removed, and so on for from two to ten minutes, but never to the extent of fatigue. The sittings should be repeated from two to five times daily for months. In esophoria, where the external recti are insufficient, prisms only can be used; and they must be weak, only from .50° to 4° with their bases in; in other respects the procedure is the same as in exophoria.

If the case be one of left hyperphoria of not more than 1.5° it is possible to develop vertical orthophoria. The left inferior and right superior recti muscles are to be developed, and this may be accomplished by placing from 0.50° to 1° prisms base up on right eye, base down over the left eye, and going through the same rhythmic exercises as in exophoria.

Dr. Geo. M. Gould believes that every case of exophoria, and possibly of developed strabismus, is certainly and quickly curable by a rapid and common method of ocular gymnastics and absolutely without operation. His method is to carry the loaded stimulus of convergence slowly beyond near range vision—that is, from punctum proximum to punctum remotum—and by repetitive gymnastics fixing it there. To illustrate, he says: "A patient is before us in whom we have determined a power of adduction at 6 meters, of only 10° instead of the 30° to 35°. He should have an abduction of 6° to 8° and a manifest exophoria of 6° to 8°. Put in the trial frame prisms 10° bases out each eye, and let patient firmly fix upon a small, bright object, held at a distance of 30 centimeters from his eyes, slowly recede, the patient keeping his gaze riveted on the object. If diplopia arise, return quickly to the patient and repeat. In normally healthy young or young adult persons, one will, usually at once be able to carry the object 6 meters away without producing diplopia. Two or three repetitions of this will enable the patient in a minute or two to look all about the room without double vision."

The prisms first used may frequently, with advantage, be not more than 5° strength, and the power of adduction may be quickly doubled. Five to ten minutes several times daily, should be utilized in this exercise, with a little reading each time, then if the defect be low and health good a few days' treatment suffices. If, however the health be poor with high degree of heterophoria the return to normal balance is slower, from two weeks to two months.

Some of our text books on ophthalmology contain no word on treatment of insufficiencies; other works which I have not mentioned give much the same

line of treatment that I have credited to Noyes. There may be other lines of treatment with which I am not familiar, and if so I hope they will be mentioned in the discussion.

Most of the lines of treatment here referred to proceed on the supposition that the error lies in a deficiency of power of certain pairs of individual muscles. Gould controverts this idea and bases his treatment on the theory that, in the vast majority of cases of esophoria, the seat of the difficulty is purely, at least primarily, and always principally, central and innervational.

I have not given you an exhaustive paper either as to the diagnosis or treatment of muscular asthenopia, partly because time is limited and long papers are not appreciated; and partly because the practical points are what the practitioner desires in a paper.

I have had some experience with all these lines of treatment, and I have not been perfectly satisfied with any of them. In looking over my case book I believe I have had my best results in exophoria by Dr. Gould's method.

In measuring adduction and abduction and in developing adductors and abductors, I use Gould's "Battery of Prisms," and find them exceedingly useful and convenient. I hope that this paper may stimulate discussion, and bring out your opinions, to the end that a better line of treatment be devised for the present (to me) very unsatisfactory methods. (Transactions of the Medical Society of the State of California, 1895.)

107 N. Spring St.

ACETANILID AS AN ANTISEPTIC SURGICAL DRESSING.

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For the past five months, since the appearance of Morton's paper, (The Phila. Polyclinic, Feb., 1895), I have been employing acetanilid in surgery as a substitute for iodoform and its various combinations. Its use has been so satisfactory that it is with pleasure this little clinical note is written and my testimony is added to that of others who have written in laudatory terms of the drug.

When applied to a wound it produces intense dryness, but no complaints have been made of a burning sensation when the drug has been applied alone; but when boracic acid is added this sensation is often complained of to a marked degree.

We have used the drug in the following combinations: various percentages of acetanilid with boracic acid, from 25 per cent to 80 per cent of the former; the pure powdered acetanilid; five and ten per cent gauze; alcoholic solution and the drug suspended in normal salt solution.

I have not used it with liquid petroleum, 40 grs. to the ounce, or with ether or chloroform. Suspended in water it serves well for injection into abscesses or sinuses. In ordinary cocoa-butter suppositories it is very efficacious in rectal affections, ulcers, or inflamed hemorrhoids.

In the following cases we have observed most gratifying results: A tuberculous abscess in Scarpa's triangle in a boy: tuberculous abscess of cervical glands; an extensive breast amputation for carcinoma in which it was necessary to sacrifice a great deal of tissue; gunshot wound of the gastrocnemius; subra-pubic lithotomoy in which a necrotic fat abscess formed on the thirteenth day; hemorrhoids, rectal ulcerations and fissures. It will be seen by this list that the drug has been freely

tried under many different conditions with success. There are, however, a small minority of cases in which acetanilid cannot be used just as some persons will not tolerate iodoform or any of the iodine compounds. In my experience I have met with two such cases. One was an amputation of the ear for epithelioma of the helix and the other was an abscess of the maxillary sinus (empyema of the antrum of Highmore). These were both elderly men, the former was aged seventy-three and the latter eighty-four. In these men acetanilid seemed to produce a deal of irritation and to delay granulation. I have had a similar experience several times with iodoform.

We use the powder very freely and in a large number of cases have not observed any toxic effects; Morton in a much larger series has noted toxic effects but twice. One case in an infant aged fourteen months, in whom excision of hip had been performed for tuberculosis and the wound packed with acetanilid; in four hours the temperature dropped five degrees; great pallor and feeble pulse. The temperature rose and symptoms disappeared upon withdrawal of the drug. The second case was one of extensive suppurative superficial scald. At twelve o'clock eight grammes of finely powdered acetanilid was dusted over the surface; at five p. m. the patient presented grave toxic symptoms; all acetanilid was at once removed, digitalis and whiskey were exhibited and by midnight he was in a normal condition.

Soper, (Medical World, Vol. XIII, No. VI, 1895, p 216) of the Sydenham Dispensary, New York, has used it with a very free hand and has observed no effect upon the temperature. He calls attention to the fact that it appears to do well up to a certain point, and then, as it were, to lose its grip, as he expressed it; he also states that the necessity of forcibly removing the crust and finding a collection of pus under it is unfavorable.

I have as already stated, observed the first condition as stated by Soper, but considered it due more to the advanced age of the subjects than to any want of response on the part of the drug. The latter condition I have never met with; when the crust was removed the granulating surface was always intensely dry as stated by Morton. In the cases in which the drug seemed to lose its grip this dryness persisted but the wound area did not decrease.

Harrell, *Medical News*, Oct., 1893; Hand, Ibid, Vol. LXIV, p 269; and Knowles Ibid, Vol. LXIV, p 419, all speak in the strongest terms of the efficacy of the drug, the former states that the wounds heal quickly even after coal dust and other foreign matter had gained entrance.

It will be seen that the drug has a very wide application, and in most cases it will prove so satisfactory that it is difficult to restrain one's self from speaking too enthusiastically. It is, however, entirely safe to say that in acetanilid we have an addition to our surgical armamentarium which is quite equal to and indeed superior to iodoform without its objectionable odor; that is no more dangerous than iodoform and that it may possess the ability to render the skin sterile preparatory to operative procedures. This, however, will require further study and microscopic investigation into the ability of acetanilid to destroy the staphylococcus epidermitis albus.

ADDENDUM.—Since hastily writing the above the recent laboratory work of Frothingham and Pratt (Amer. Jour. Med. Sci., August, 1895,) upon the anti-bacterial action of acetanilid has come to my notice. These experiments show that the inhibitory action of acetanilid is much more marked in the one per cent. than in the 5 per cent. tubes. The growth of the bacillus pyocyaneus is much more affected by the presence of acetanilid than the other organisms.

The experimenters conclude as follows: Although acetanilid has not been very

widely employed as a surgical dressing, in the cases where it has been used the results have been so successful that its superiority over iodoform seems very probable, and its use instead of the latter indicated.

Laboratory experiments uphold the clinical proof of its value as a surgical dressing, and the conclusions which the experiments teach are:

1. That acetanilid is probably to a very slight extent a germicide.
2. That acetanilid is decidedly an antiseptic.*
3. That, as an antiseptic, acetanilid is far superior to iodoform, and that certainly from a laboratory, and probably also from a clinical, standpoint its substitution for the latter seems warranted.

Their experience is contrary to that of some other observers, in that they state that there is no danger of poisoning from the absorption of acetanilid.

1854 Fourth Street, San Diego, Cal.

*In this connection it is perhaps well to remember Sternberg's definition: "Antiseptics restrain the growth of micro-organisms which produce septic decomposition without destroying their vitality. Disinfectants destroy the germs of infectious diseases. Germicides are an extended term of the latter, agents that kill non-pathogenic bacteria as well as disease germs."

SELECTED.

DEPARTMENT OF MEDICINE.

UNDER THE CHARGE OF DRS. F. D. AND ROSE T. BULLARD.

SOME NEW THEORIES OF DIGESTION.—(Editorial, National Medical Review.) For a number of years it was our privilege to be able to give almost exclusive attention to the study of physiology. Nothing can be more fascinating either to pupil or teacher. During all this time, and even up to the present day, we had to believe that "the principal object of the saliva is to moisten the food and thus aid mastication and deglutition." And yet, we had to face the fact that an enormous quantity of saliva was secreted every twenty-four hours. It appeared almost like a waste of the forces of nature. We had to believe that the moment this saliva reached the stomach it became inoperative. But now all this is about to be changed. Although Freirichs came to the conclusion a number of years ago that salivary digestion continued in the stomach, yet his work was practically lost sight of. Now Dr. J. H. Kellogg, of the Battle Creek Sanitarium, has just published the report of some extensive experiments in his Laboratory of Hygiene, on starch digestion. Dr. Kellogg examined the contents of the stomach, after a test meal, in 4,875 cases. In 669 of these cases he found the starch had been completely converted into sugar. Only in 1.8 per cent. of the cases did he find there was little or no conversion of the starch. This certainly must be accepted as conclusive, and hereafter we must teach that the digestion of starch takes place in the stomach by the aid of the saliva ferments. Clinically this will be of great value, and must result in a number of changes in our ideas of diet.

It is only within a few weeks that a chemist of Brooklyn, N. Y., Prof. E. H. Bartley, published an article in the New York Medical Journal, setting forth the dangers of having digested starch in the stomach. Our readers may recall the fact that a number of years ago a committee of American chemists were asked to report upon the dangers of taking a pre-digested starch into the stomach. Glucose was becoming such a generally distributed article, and was so largely used in the manufacture of confectionery that this committee was asked to report upon its effects on the system. The report was both exhaustive and conclusive that no deleterious effects would follow its use, even in large quantities. But

Prof. Bartley has recently taken exception to this report. This is a very important question, for it is a fact that today the best candies in the world contain a large amount of glucose; while the most popular beer on the market has recently been shown to contain a larger proportion of glucose than any other brewed in this country.

It is very interesting to analyze some of the statements of Prof. Bartley; for instance, he says that milk sugar and cane sugar are "intended" as foods in preference to grape sugar, because the former require digestion before they can be absorbed. From this it is safe to reason that the more difficult a food is to prepare for absorption, so much the more was it "intended" as a food; therefore, boiled pork and cabbage were "intended" as foods in preference to the more easily digested eggs and milk!

Prof. Bartley then speaks against cooked fruits, jellies, preserves and fruit pies; because, he says the cane sugar is changed into glucose by heating it with the acid fruits. As is well known, "prolonged boiling" with an acid is necessary to make this change, while it is a fact that the practical housewife only brings her peaches and pears to a boil. Prof. Bartley further declares that the reason why some persons can eat raw apples "without stint and without after-distress," and yet "cannot eat apple pie without distressing after-effects," is because the latter contains this inverted sugar! This is almost ludicrous. It occurs to us there is more difference than this between ripe fruit, raw apples and the average apple pie with its historic crust! An equally absurd illustration is where he declares, "some persons can drink lemon juice and water, but are sickened by lemonade or lemon pie." As if lemonade were cooked! For he declares that it is the heating with the acid that changes the sugar into glucose; therefore, he must take his lemonade "after prolonged boiling!" While lemon pie, it occurs to us, has something more in it than digested starch to make it indigestible.

But this article is written with the view of showing how easily any number of theories may be overthrown when all the facts are made known. Prof. Bartley says that digested starch is absorbed too quickly while in the stomach, and, thereby, "may prove too great a task on the liver," and "the blood may be overcharged with dextrose." The professor reasons that when milk sugar or cane sugar is taken it is digested below the stomach, and there more slowly absorbed. The whole drift of his article is to frighten those who take a pre-digested starch, for fear of causing diabetes!

In the light of the recent investigations of Dr. Kellogg, the absurdity of any such view is at once apparent. We now know that nature herself is digesting our starchy foods in the stomach, and that if these digested starches, or if this glucose, could in any way cause diabetes we would ere this be a race of diabetics.

For a long time there has been a growing sentiment throughout Germany that diabetes has not been properly treated. Hirschfeld says that he believes that diabetic coma is favored by the exclusion of carbohydrates in the diet. Schmitz allows his diabetic patients a small quantity of albumen, while he orders the free use of food containing starch, and fat in large amount. Grube impregnates the system with the carbohydrates. Williamson, of Manchester, says that home-made bread is much better than especially prepared diabetic bread. A number of American physicians are following out this line of treatment with better results than they have had heretofore.

In the light of all this, we must conclude that saliva continues its action on starchy foods in the stomach until nearly, if not all, the starch is changed into glucose; that glucose is simply a normal product of digestion, and no more in-

jurious than a digested proteid; and that the treatment of diabetes is bound to undergo a marked change in the near future.

CONTROLLERS FOR DYNAMO CURRENTS. (Jour. Amer. Medical Assoc., Aug. 3.) Report of Committee to American Electro Therapeutic Association, W. J. Herdman, M. D., Chairman: Considerable attention has been given since the last meeting to that class of instruments designated to employ the constant currents generated by dynamos used for electric lighting, etc., and often available for physicians' use. Three have been furnished for investigation; all act upon the shunt principle. The McIntosh current controller is designed for portability, though not at the expense of durability. * * * A delicate fuse is constantly in the machine circuit, so placed that all the current traverses the fuse before it reaches the point where the patient's circuit joins the machine circuit. This avoids all possibility of a dangerous increase in the current strength in the patient's circuit. The fuse is so adjusted that a current of one-half an ampere in the machine circuit would instantly melt it, and thus disconnect the instrument entirely from the dynamo. The machine circuit consists of a succession of coils, nineteen in all, joined in series, and having an united resistance of 209 ohms. The patient's circuit is so arranged with sliding contacts that the patient may be placed in a shunt to one or more coils. The coils vary in size, but are so proportioned as to modify the current in tenths and hundredths. The contact consists of a heavy brass roller on a flat brass plate and held tightly in contact by a flat brass spring. * * *

This current controller seemed to work quite as well on the current furnished from any one of the various forms of primary batteries made up of fifty cells. * * * It appears, therefore, that we have in this controller a simple and efficient mechanical device for adapting both constant and alternating currents, or currents derived from primary batteries, to the physicians' use.

WHY FRUIT SKINS SHOULD NOT BE EATEN. *Health* warns us that fruit skins carry germs and are no more intended for human sustenance than potato skins, melon rinds or pea pods. Dr. Maria Duncan says: "The bloom of the peach is a luxuriant growth of microbes, that of the grape only less so; and when these skins are taken into the stomach, they find most favorable conditions for their lively and rapid development, which causes the decay of the fruit before it is possible to digest it. This is the reason why many people think they cannot eat raw fruit. If they would in all cases discard the skin, they could derive only good from the fruit itself. Nature provides the skin for the protection of the fruit from the multitude of germs which are ever ready to attack it, as is evidenced when the skin is bruised or broken in any way—the microbes at once begin their work of decay, and the fruit is unfit for food. Children are the chief offenders in respect to this rule, and should be carefully watched and frequently cautioned. A daintiness as to the condition of fruit should also be cultivated, to prevent its being eaten unripe or too old—on the verge of decay. Remember that it is sweet and ripe fruit, in prime condition only, that is recommended."

A SIMPLE EXPEDIENT FOR THE RELIEF OF NOCTURAL ENURESIS. (Edit. in Boston Med. and Surg. Journal.) Stumpf in the *Munchener Med. Woch.* gives an account of a simple and apparently rational expedient which he has successfully adopted in the treatment of nocturnal enuresis, especially in older children. His theory is that during sleep the sphincter of the bladder is apt to become relaxed, so that as the child lies horizontally in bed a little urine passes the sphincter and enters the deep urethra. The irritation of this urine causes at once strong reflex action of the detrusor and the bladder is at once emptied in a

full strong stream. It is a well known fact that in nocturnal enuresis, the urine does not leak away gradually, but the bladder is emptied at once, a point which is in support of this theory. To prevent this passage of urine into the urethra, he has the pelvis elevated, so that an accumulation of urine of ordinary amount in the bladder, will gravitate back and distend the fundus and not press against the sphincter. The elevation is secured by allowing only a small flat pillow under the head and placing the thighs so that they lie at an angle of 130° to 150° with the horizontal spine. It was uniformly successful in fourteen cases. It was usually necessary to continue the treatment for three weeks, after which the children were able to return to former sleeping position without relapsing. The chief difficulty is to be sure that the position is maintained through the night and it is therefore especially adapted to older children.

EYE, EAR, NOSE AND THROAT.

UNDER THE DIRECTION OF W. D. BABCOCK, A.M. M. D., PROFESSOR OF DISEASES OF THE NOSE AND THROAT, COLLEGE OF MEDICINE OF THE UNIVERSITY OF SOUTHERN CALIFORNIA.

CIMICIFUGA, ALCOHOLIC TINCTURE FOR PAIN IN EYE AND EAR.—(Kansas Med. Record.) Gill. Paint the alcoholic tincture around the eye and ear as rapidly as it dries, using from half to a drachm of the tincture each time. Pain is relieved in from fifteen to thirty minutes.

COMPARATIVELY PAINLESS MASTOID DISEASE.—(Med. Rec. July, '95.) Buck reports four cases of an acute character, with pain at the onset, which soon became almost painless. After giving the usual symptoms which characterize mastoid trouble, all of which were absent, even the prolapsed condition of the upper cutaneous wall of the inner half of the external auditory canal, which is almost invariably present, being absent. Summing up the result of four cases, he says, first, serious disease of the mastoid process may coexist with an insignificant pain in the affected region. Second, of all the physical evidences of disease in this part of the temporal bone, the one that is most rarely lacking is a prolapsed condition of the skin lining the upper and posterior wall of the external auditory canal near the membrana tympani.

EPISTAXIS. (Med. Record, July 1891.) Richardson. The doctor mentions a practical point in nose bleeding, viz: Prior to the final removal of the posterior plug from its position; secure a second double (fresh) cord to the one which passes through the nasal cavity out through the anterior orifice; as the old plug is removed let the new double cord trail after it, thereby placing it in position for immediate use should occasion again arise for post-nasal plugging.

LARYNGEAL TUBERCULOSIS. (Medical Journal, July, 1895,) Levy. In summing up the treatment of laryngeal tuberculosis, the doctor puts it, "Whether we accept the surgical and lactic acid treatment for their curative effects or not, I am convinced that judicious application of these substances, not infrequently, affords great relief to our patient. Instances haev occured where cocaine, morphine and a variety of palliatives offered no relief whatever; upon application to the ulcerations of a fifty per cent solution of lactic acid, these patients became extremely comfortable so far as pain was concerned. Even heroic curettement has given some patients complete relief from pain in swallowing food after the immediate effect of the operation had subsided. I have no hesitancy, therefore, in offering as the *best palliative* at our command a judicious application of *lactic* acid and *curettement* or *both combined.*

DEAFNESS—WHAT ARE WE DOING TO PREVENT IT?—(Medical Journal, July, '95. Strangways) The doctor closes an article on the subject with these words: "Most of our authorities on the diseases of the ear are men past middle age, and consequently received their training before we learned how to treat diseases of the nose. These authorities advise us to inflate the ears and swab the post-nasal space, and by so doing we help our patient, but, unfortunately, the next fall or spring he catches cold and the old trouble grows worse, and we are blamed, for we should have removed the predisposing cause found, either in the nares or post-nasal space. Let us prevent and cure nasal and post-nasal troubles and we will prevent two-thirds of all cases of deafness."

PROGNOSIS IN ALBUMINURIC RETINITIS.—(Annals Oph. Otol. July, 91.) Bell. From all the statistics I have been able to find we get the following results: Cases in private practice, 155; of these 62 per cent died within a year; 85 per cent. in two years, and 14 per cent. lived over two years.

Hospital cases, 77. Of these, 85 per cent. died within one year; 93 per cent. within two years; and 6 per cent. lived more than two years.

Mixed cases, 187. Of these 85 per cent. died within one year; 93 per cent. within two years, and 6 per cent. lived more than two years.

Total number, 419. Of these 72 per cent. died within one year; 93 per cent. within two years, and 9 per cent. lived longer than two years.

OPHTHALMIA NEONATORUM.—(N. Y. Eye and Ear Hospital Report, Jan., '91.) Francisco. A bacteriological examination was made in all cases (40.) Thirty were gonorrheal, in which category were all the cases where the discharge appeared on or before the fourth day. Those in which it appeared from the fifth to the eighth day were not gonorrheal,. All the severe cases were gonorrheal, but many of these cases were so mild that they were only distinguished by the presence of the gonococcus. . . . In no case that was not gonorrheal was the cornea attacked. The average duration of the gonorrheal cases was fifty-three days; of the others, thirty-six days. The treatment was ice pads, boric acid solution, and the daily application of solution of silver nitrate, 1 to 4 per cent.

CORRESPONDENCE.

TURTLE BLOOD FOR TUBERCLES.

Dr. M. C. O'Clery, the mining man, recently returned from a prospecting tour of unusual hardship and length. He went to the western coast of Sonora for a mining company, and spent some time along the gulf coast, both in Sonora and Lower California, visiting several islands and the towns of Guaymas, La Paz, Muleje, Santa Rosalia and San Juan. He returned the same way he went, and was very glad to get back and breathe cool air.

"It is fearfully hot there," he said to a *Los Angeles Daily Journal* reporter, "so hot that I thought at times I would have to succumb, and I am used to heat, too. On the gulf itself it is not so bad, and some of the islands are very pleasant. The life there is something entirely different from anything I have seen elsewhere, and I found many things to interest me. I will tell you of one:

I had three Indians working for me, rowing my boat and keeping camp. Two of these men I had known before as miserable, dead-alive wretches, apparently at death's door from consumption or some other incurable disease. Imagine my surprise when I saw them this time, stout, healthy, both the pictures of health, and rowing a boat all day without fatigue—typical Yaqui bucks. I asked them

what had caused the change, and they told me that it was from drinking turtle blood.

Turtles, as you know, abound by the millions in the gulf. They are from 100 to 500 pounds in weight and constitute the principle food of the Tiburon Islanders, those strange people who have never become fully known to the outside world. Well, these two Yaquis had come to the conclusion, from their savage instinct, that as the turtle is very tenacious of life, and as the Tiburon islanders are strong, healthy giants, perhaps there was some virtue in the blood. They weighed only 80 and 90 pounds each when they began to drink the blood, and said that in two months there was a wonderful cure.

Now, I do not wish to vouch for the efficiency of turtle blood. I simply give their story and vouch for the fact that they are cured. But I am inclined to think that these simple Indians have discovered something that will be of great value to mankind in the cure, or at least alleviation, of blood and pulmonary diseases.

I will give you a sample of the tenacity of life of a turtle from my own experience: I cut off the head of one and kept it in the bottom of the boat. Occasionally I would touch the pupil of the eye, and I found that after a lapse of over two hours and a half the eye would shrink and close at my touch. Mind you, all connection with the spinal column had been completely severed. I have often heard of the apparently automatic expansion and contraction of a turtle's heart after death, but consider my experience with the eye as showing conclusively a wonderful strength of life.

"Turtles quickly recover from wounds which would be mortal to any other animal. They have phenomenal powers of muscle, and seem to be able to retain the blood within the body even with the arteries cut. I noticed that the Indians had to poke and stir them up in order to make them bleed. I tasted the blood. Being cold, it is not offensive to the stomach, and the taste is something like cow's milk. Truly, I believe that a consumptive or sufferer from blood disease could become cured, or at least greatly improved, if he would go down and live on one of the islands of the gulf and drink turtle blood. The Mexicans and Indians swear by the remedy, and use various parts of the turtle, dried and powdered, for many maladies.

LICENTIATES OF THE CALIFORNIA STATE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners of the Medical Society of the State of California held Aug. 6, 1895, the following certificates were granted:

BROWNE, JAMES, 4088, Portland, Or., Medical Department Willamette Univ., Or., April 2, 1895.
CALDWELL, HENRY JAMES, 4089, San Francisco, University Trinity College, Canada, April 5, 1885. Trinity Medical School, Canada, April 16, 1885.
CARTER, CHARLES HENRY, 4060, Pasadena, Cal., Rush Medical College, Ill., February 24, 1880.
CASSEL, ELIZABETH H., 4061, Salinas, Womans Hospital Medical College, Ill., February 27, 1883.
CAVINS, RILEY W., 4092, Los Angeles, Indiana Medical College, Ind., February 29, 1872; Medical College of Indiana, March 1, 1882.
CRAIG, THOS. L., 4093, Monterey, College of Physicians and Surgeons, Keokuk, Ia., March 2, 1881.
DUDLEY, FRANK W., 4094, San Francisco, Medical Department University California, July 13, 1895.
FREDERICKS, MARCUS W., 3095, San Francisco, Medical Dept. University Leipsic, Germany, April 27, 1888.
HELMS, GEORGE LEO, 4096, San Francisco, Medical Dept University California, July 13, 1895.
HULL, JAMES P., 4097, Lockeford, Medical Dept. University California, July 13, 1895.
HUNTER, GEORGE F., 4098, San Francisco, Medical Dept. University Buffalo, N. Y., Feb. 21 1881.
LEE, CHARLES E., 4099, Anaheim, Medical Dept. State University Iowa, March 5, 1873.
LUTZ, FREDERICK A., 4100, Carson, Nev., Medical Dept. University California, July 13, 1895.
MCCLUM, MARAH E., 4101, San Francisco, Cooper Medical College, Cal., December 7, 1894.
MCCOLLOUGH, A. M. F., 4102 Los Angeles, Jefferson Medical College, Pa., March 10, 1877.
MCKNIGHT, HELEN, 4203, San Francisco, Medical Dept. University California, November 20, 1894.
MORAN, FRANK B., 4104, Healdsburg, Medical Dept. University Michigan, June 28, 1894.
PARKER, IDA B., 4105, Los Angeles, Coll. Medicine University Southern California June 4, 1895.
PHEDAN, GREGORY, 4106, Brussels, Belgium, Medical College of the Pacific, Cal., October 28, 1880.
PRESTON, JAMES LOUIS, 4107, Los Angeles, Medical Dept. University City of New York, June 18, 1888.
QUIGLEY, JOHN M., 4108, San Francisco, Medical Dept. Williamette University, Or., April 4, 2892.
SANKEY, MARY J., 4109, San Francisco, Medical Dept. University California, July 13 1895.
SCHMELZ, CHARLES J., 4110, San Francisco, Medical Dept. University California, July 13, 1895.
SMITH, LARZ A., 4111, San Francisco Cooper Medical College. Cal., December 6, 1894.
TATE, C. FRANCIS S., 4112, Los Angeles, Coll. Medicine University Southern California, June 4, 1895.
TIEDEMANN, JOHN, 4113, San Francisco, Long Island Coll. Hospital, N. Y., March 31, 1894.
TRAFTON, WM. A., 4114, Dixon, Medical Dept. University California, July 13, 1895.

REFUSED:

W. HAYDEN, Insufficient Credentials.

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EDITORIAL.

MEDICAL CHEMISTRY

Of the seven fundamental branches of medicine, anatomy, physiology, chemistry, materia medica, obstetrics, surgery and practice, chemistry is the one usually despised by students as mere theory. So broad is the science, and so little in it has seemingly a direct bearing on his profession that he feels disposed to neglect it. He wishes to jump at once into its applications forgetting that he must first know its principles. So few pupils have an adequate knowledge of this science, medical schools are obliged to teach general chemistry, and if that is taught in an uninteresting and purposeless manner the whole branch suffers. But physiology, chemistry, urinalysis and toxicology are very practical subjects, the chemistry of digestion alone is of great importance and even yet not fully understood; the subject of auto-intoxication from leucomain poisoning has hardly been touched upon; the antitoxin treatments seem to give us a bright future for therapy. If we could but fully understand the journey in the system from proteid to urea, from carbohydrate to carbon dioxide, that is, if we compre-

hended digestion, tissue metamorphosis and elimination, or in other words, if we knew all about chemical physiology we would avoid many of the ills of human flesh we now suffer, such as dyspepsia, rheumatism, migraine and many other so called nervous troubles.

We know, however, much of practical aid if we only make use of it; for instance, the gastric juice is acid, and that acidity immediately after eating may be due to lactic acid derived from the food; later it is acid on accout of the hydrochloric acid secreted by the stomach. There are some conditions in which the hydrochloric acid is absent, diminished or increased, but to answer that question tests must be made on samples taken from the stomach during the height of digestion, preferably one hour after a test meal. Chemists have examined with negative results, matters ejected ten minutes after eating, but on subsequent investigation of contents of stomach one hour after a test meal discovered hydrochloric acid in normal amounts, and thus give a negative to the question of carcinoma; hence the importance not only of doing the right thing but of doing it at the right time.

Again the acidity of the stomach may be due to butyric acid which is derived from the overeating of fats, a fault very prevalent in boarding houses and restaurants; hence, people patronizing such places ought to avoid grease and its resulting butyric acid dyspepsia.

A very common error in diet is the drinking of too little liquids, at least eight ounces of fluids should be taken at meal times, both to make gastric juice and to enable it to handle the the food properly. Then again quite an amount of water, some four pints, is essential for proper elimination of solids by the kidneys.

Milk is an excellent dinretic, but it constipates, this property can be removed by boiling and skimming off the thin film of serum albumen. Milk thus treated is readily digestible and free from all dangerous bacilli.

Pepsin should never be given in an alcoholic menstruum else it be precipitated, and concentrated, alcoholic liquors should never be given on an empty stomach; all the other digestive fluids are alkaline, hence in rectal alimentation the nutriment should be given in an alkaline menstruum.

Chemical physiology teaches that not only used up tissue but excess of foods are eliminated by the excretory organs, hence the great importance of diet, and the dangers of over-feeding in nephritis; it declares as an inviolable law of biology that an increase or decrease in weight proves that more or less food than is required by metabolism is ingested; it therefore lays down the broad dietary principles of generous nutritious food for the weak, the avoidance of fat forming foods for the obese, the shunning of acid producing substances for the lithemic, and the reduction to a minimum of starches and sugars for the diabetic.

Through urine analysis, chemistry gives us warning of many conditions, it not only detects and measures albumen or sugar, it notes if the balance of nitrogenous waste is correct, it tells of uremia and uric acid poisoning, it measures exudation by the chloride tide, it foretells diabetic coma by the presence of acetone; indeed no case should ever be undertaken without careful study of the body's chief excretion.

A knowledge of chemistry is so obviously necessary, to prevent the writing of incompatible prescriptions, to successfully treat poisons, and to inteligently examine many subjects in medical jurisprudence that the veriest tyro will admit its practical use in such cases. It is however, of importance at all times and in all cases, many a patient can be cured by the regulation of diet and the encouragement of elimination, and it is chemistry which tells of the proper foods and warns us of the deficient elimination. Hence, we plead for a better knowledge of this science, a more careful consideration of diet and a closer examination of urine.

IRON, MALT AND CINCHONA.

It has long been thought that iron enters the system not free or in inorganic salts but under organic combination. It therefore seems reasonable to give it in such a form; the diastasic properties of malt, and the tonic power of cinchona are known the world over. If then some combination of these valuable remedies can be made which is palatable and efficient at the same time, there will result a preparation which will be of use in all debilitating diseases. We have had occasion to personally test several samples of such a combination made by the well known firm of Clinton E. Worden & Co.

The menstruum of this preparation—called *Maltofer*—is a well matured wine of exceptional purity, and we are free to confess that it comes as near removing the disagreeable taste inherent in these drugs as anything we have ever seen. It does not constipate and seems to be a rational as well as an agreeable formula. It stimulated the appetite and was kindly spoken of even by those who usually rebel against bitter ferruginous tonics.

LINEN UNDERWEAR.

The skin has a three-fold function, protection, heat regulation and elimination. The first two of these offices may be supplanted by clothing, and of necessity the freedom of the last is somewhat embarrassed, for no one material can keep in heat and allow to the fullest extent free exit to excrementitious matter.

It has been customary to employ different materials for underclothing, according to season, cotton for summer and woolen for winter. The former is especially bad, as it allows rapid evaporation; the

latter is a poor absorbent and quite impervious. Linen, as usually manufactured, is coarse, stiff and causes a sensation of chilliness by allowing too free dissipation of bodily heat. There has been invented a fabric of linen, which is at the same time soft and porous, the fibers of which are made of six strands woven in an open mesh. This linen mesh cloth is very absorbent, does not feel harsh to the skin, and does not cause the wearer to feel chilly. Worn next to the skin it readily takes up perspiration, and from its porosity allows thorough ventilation. It dries quickly and thus avoids the clamminess incident to cotton.

In this climate, where the nycthermal range is twice the seasonal variance, it is of especial importance to have clothing adapted to such changes, so that the wearer need not swelter at noon nor chill at sundown. Rheumatics and catarrhal individuals notice meteorological variations quickly; such unfortunates most recognize the daily change here, and clothing that will allow free perspiration and yet feel warm cannot fail to be appreciated by them.

DEATHS AND BIRTHS.

Such statistics as the following, from the *Los Angeles Record*, are always of interest to the climatologist. The deaths and births, as recorded at the Los Angeles Health Office, for the first six months of the years 1894 and 1895, are contrasted.

The deaths are shown by the following table, copied from the monthly reports:

	1894.	1895.
January	94	104
February	92	81
March	108	107
April	99	119
May	90	96
June	105	94
Total	588	601

In view of the fact that the school census shows there has been an increase of at least 8000 in the population of the city in the last year, the showing made is an unusual one from a health standpoint.

The record of births for the same period shows that 100 more births took place during the first six months of the present year than the first half of 1894.

	1894.	1895,
January	107	106
February	60	85
March	124	121
April	84	113
May	107	126
June	81	112
Total	563	663

The total number of cases of contagious diseases reported to the health authorities in the first six months of 1894 was 149, while the records for the first six months of this year show 151, certainly a very insignificant increase in view of the enlarged population. One of the most interesting features of the reports of the health officer for the past few months has been the introduction of a table in the monthly reports showing the number of deaths from pulmonary troubles and the period that the decedents resided in this city. There were ninety-nine deaths from pulmonic causes in the city since the first day of last March, and of this number thirty-seven of the deceased had only been in the city for six months. Ten more had only resided here for one year and eight more had been here for two years.

Only five persons born in this city died from lung troubles. Out of a total of ninety-nine deaths fifty-five had only been in the city for two years. These had come here from the East to seek relief from the dread clutch of consumption. The death rate of the city is being gradually lowered, with the construction of sewers and increased attention to sanitary matters.

EDITORIAL NOTES.

Dr. L. Zabala is now studying in Paris.

Dr. E. R. Bradley has moved into the Pirtle block.

Dr. D. W. Hasson, of Mentone, has moved to Winchester where he will practice his profession.

Dr. Otto and family, of Santa Barbara, have returned home after an absence of a number of months in Europe.

Dr. G. A. Scroggs, of Tempe, Ariz., has been appointed assistant surgeon of the Maricopa and Phœnix railway.

Dr. J. V. Larzalere, formerly of Buffalo, is now located in National City and has begun the practice of his profession.

Drs. West Hughes, Wm. Chapman, W. H. Ward, J. F. Lemmon and Peter Janss have taken offices in the Byrne block.

Dr. Emil Weschcke, lately of San Francisco, has located in San Luis Obispo and entered into partnership with Dr. G. B. Nichols of that place.

Dr. Dora Fugard, who came to Los Angeles about a year ago from Denver, and then went to Europe with her sister, has returned and is located at 1005 South Broadway.

Dr. Lula T. Ellis, accompanied by her sister, Miss Charlotte M. Talbott, has started to Europe, contemplating a years' absence. Dr. Ellis will pursue her microscopical studies in Vienna the coming winter.

Dr. G. W. Lasher has returned from a two months' trip to the east.

Dr. M. L. Moore went on the Knight Templar excursion to Boston. The Doctor will remain about a month and take a much needed rest.

The Santa Barbara Medical Association is in prosperous and harmonious condition. At a recent meeting the following officers were elected: President, Chas. Anderson, M. D.; Vice President, Richard A. Hall, M. D.; Secretary, Robt. McKinley, M. D.; Treasurer, Chas. B. Bates, M. D.

Los Angeles still continues to put on metropolitan airs; the second half of '95 finds her with another medical journal, the *Los Angeles Polyclinic*, edited by Dr. J. F. T. Jenkins, assisted by the staff of the Polyclinic. It presents a neat typographical appearance. The first number, besides an original article by Dr. A. Davidson, has numerous excerpts from foreign and domestic journals.

Dr. Gertrude Taft, Med. Dept. U. S. C., 1893, sailed from San Francisco August 3 for Ching-Kiang, China, under the auspices of the Pacific Branch of the Woman's Foreign Missionary Society of the Methodist Episcopal Church. Dr. Taft will have charge of the hospital and general medical work at her station. The field is an extensive one, affording vast opportunities for the exercise of her admitted skill and her boundless benevolence.

We clip the following from the Anaheim Independent, July 20th: We do not reflect upon the departure of Dr. J. H. Bullard from this city without deep regret. The doctor, aside from his excellence as a physician is a most desirable citizen, such as all communities stand in need of. Dr. Bullard expects to remove to Los Angeles sometime during next week. He will first take a much needed rest from professional labors, after which, his love for his chosen calling will probably claim his attention. The very best wishes of the Independent are his.

Dr. Fannie C. Hutchins, has gone to San Francisco to take the position of resident physician at the Woman's and Children's Hospital. As Dr. Hutchins had served there as *interne*, the tendering to her of this position shows the high estimation in which her services were held. We also consider it a compliment to the Medical Department of the University of Southern California that a second resident physician to the *northern* hospital should be selected from it, Dr. Mary E. Hagadorn having served there in 1893.

PAMPHLETS RECEIVED.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF CALIFORNIA. Twenty-third announcement. 1895-1896. San Francisco, Cal.

ANNUAL ANNOUNCEMENT OF THE COLLEGE OF PHYSICIANS AND SURGEONS. Kansas City, Kan. 1895-1896.

COLLEGE OF MEDICINE OF THE UNIVERSITY OF SOUTHERN CALIFORNIA. 1895-1896. Los Angeles, Cal.

MEDICAL DEPARTMENT, UNIVERSITY OF DENVER. Fifteenth Annual Bulletin. 1895-1896. Denver, Col.

FIFTY-FIFTH ANNUAL ANNOUNCEMENT OF THE MISSOURI MEDICAL COLLEGE. 1895-1896. St. Louis, Mo.

THIRTEENTH ANNUAL ANNOUNCEMENT OF THE MEDICAL DEPARTMENT OF NIAGARA UNIVERSITY. 1895-1896.

FIFTY-FIRST ANNUAL ANNOUNCEMENT OF THE ECLECTIC MEDICAL INSTITUTE. 1895-1899. Cincinnati, O.

ANNUAL ANNOUNCEMENT OF THE JOHNS HOPKINS MEDICAL SCHOOL. 1895.1896. Baltimore, Md.

REGISTER OF VANDERBILT UNIVERSITY: MEDICAL DEPARTMENT. 1895-1896. New York.

FIFTEENTH ANNUAL ANNOUNCEMENT OF THE UNIVERSITY MEDICAL COLLEGE. 1895-1896. Kansas City, Mo.

FOURTEENTH ANNUAL ANNOUNCEMENT OF THE COLLEGE OF PHYSICIANS AND SURGEONS OF CHICAGO. 1895-1896.

FIFTY-NINTH ANNUAL ANNOUNCEMENT OF THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF LOUISVILLE. 1895-1898. Louisville, Ky.

UNIVERSITY OF PENNSYLVANIA. Founded 1740. Circular of Information Relating to Courses in Biology. 1894-1895.

FIFTY-FOURTH ANNUAL ANNOUNCEMENT OF THE ST. LOUIS MEDICAL COLLEGE. 1895-1876. St. Louis. Mo.

ANNUAL ANNOUNCEMENT OF THE COLORADO SCHOOL OF MEDICINE. UNIVERSITY OF COLORADO. 1895-1886. Boulder, Col.

TREATMENT OF ADVANCED (HELPLESS) CASES OF PHTHISIS. By EDWARD O. OTIS., M. D., Visiting Physician to the Free Home for Consumptives. Reprint from Boston Medical and Surgical Journal, June 50, 1895.

PREVENTIVE DISEASE SERIES. CONSUMPTION. ISSUED BY THE STATE BOARD OF Health for General Distribution.

ANTI-TUBERCLE SERUM. By PAUL PAQUIN. St. LOUIS, Mo. REPRINT FROM the St. Louis Medical and Surgical Journal, March, 1895.

CYSTIC TUMORS OF THE VAGINAL VAULT. By FREDRICK H. WIGGINS, M. D., VISITING Surgeon to the New York Hospital. Reprint from New York Medical Journal, July, 1895.

THE INFILTRATION METHOD OF LOCAL ANESTHESIA IN GENITO-URINARY SURGERY. By Bransford Lewis, M.D., Professor of Genito-UrinarySurgery and Venereal Diseases, College of Physicians and Surgeons, St. Louis. Read before the American Association of Genito-Urinary Surgeons al Niagara Falls May 28, 1895.

A Practical Low-Priced Device to Secure the Trendelenburg Posture. By Wm. A. Edwards, M.D., San Diego. Fellow of College of Physicians. Philadelphia. Reprint from University Med. Magazine, June, 1895.

Medical Terminology, its Etymology and Errors. By P. J. M'Court, M. D. New York. Reprint from the Medical Record July 27, 1895.

BOOK REVIEWS.

PATHOLOGY AND TREATMENT OF DISEASES OF THE SKIN. For practitioners and Students. By Dr. Moriz Kaposi, Professor of Dermatology and Syphilis, and Chief of the Clinic and Division for Skin Diseases in the Vienna University: Translation of the Last German Edition: New York: William Wood & Co: Bound in Extra Muslin at $5.50 Per Copy, and in Leather at $6.50 Per Copy.

The excuse, or rather the reason for the publication of this work on Dermatology is that it expresses the views and relates the experience of the greatest continental authority on that subject. Specialists everywhere will accordingly use this as a reference, and the general practitioner will look to it with a confidence born of the knowledge of its high character. The translation is remarkably smooth, and one feels in perusing it that it is an original rather than a translated work.

The subject matter is written in the form of lectures, which gives a liveliness that would otherwise be wanting. The reviewer attended Kaposi's lectures one season, and well remembers the snap and vivacity which characterized his rapid speaking. Kaposi's lectures were never dull, and we notice even in this work side remarks which doubtless filled the amphitheater with laughter, e. g., "people with bromidrosis pedum literally stood in bad odor." "Habitually sweating hands always feel clammy. Such a condition lessens the desire of grasping the hand of even the most beautiful woman."

The first ninety pages are devoted to general remarks on anatomy, pathology, symptomatology, etiology and general therapy. He follows Hebra's classification of skin diseases: 1, Hyperæmias; 2, Anæmias; 3, Anomalous cutaneous secretions; 4, Inflammations; 5 Hæmorrhages; 6, Hypertrophies; 7; Atrophies; 8, Innocent neoplasms; 9, Malignant growths; 10, Ulcerations; 11, Neuroses; and 12, Parasitic dermatoses.

In the fourth lecture there is an interesting account of arrangement of eruptions which the author believes to be governed by one or all the following: vasomotor influences; spinal nerve distribution, direction of small vessels and lines of cleavage of the skin. The fifth lesson, on general causes and diagnosis, insists on thorough consideration of all the facts attainable, and especially emphasizes the necessity of thorough and complete inspection. Here, as in any other science, the more the observer knows the more he sees, just as the botanist takes in the details of a plant where the layman but sees the general effect.

For the successful treatment of skin diseases Kaposi places great stress on the following points: Correct diagnosis of the separate symptoms of the disease in each spot and phase, the determination of what alteration must be produced in order to effect a cure, and the knowledge of what medicines and their mode of application which will bring about such changes. Accordingly, it is not all of diagnosis to name a disease, but rather to appreciate its form, present phase, probable course and expected behavior, nor all of treatment to write a prescription, the manner, time and frequency of application are to be carefully considered. He gives a goodly list of old and new remedies, and sits down hard on the

idea of "driving in" a skin disease as scientifically inconceivable and impossible.

"A cat can can look at a king" and so, though a humble reviewer we take issue with Kaposi's calling rotheln, measles; having had personal experience with both diseases, we should regard them as distinct maladies. He regards leprosy as due to bacillary infection, but not contagious, and consequently negatives compulsory isolation of such patients, (page 572.) Yet on the same page he speaks of the rapid propagation (of leprosy) by contagion in the Sandwich Islands in twenty years. On account of the score or so of lepers in this state the question of quarantine is very important to Californians, and it will be wise to rigidly enforce it, though eminent specialists may think it unnecessary.

Such points as the above are Kaposi's opinion on mooted questions; when it comes to the practical diagnosis and handling of disease, he is the peer of any man now living. For extensive burns, for instance, he advocates the immersion in a continuous bath as a real remedy and of positive benefit to the patient, especially during the period of suppuration. The naturalness of such a proc edure appeals to all as the best protection against pain, favoring the removal of eschars, preventing pus decomposition and abating fever. To go through all the diseases spoken of by the author would be a needless task to both reviewer and reader; enough has been said to show the character and excellence of the work. We have endeavored to show the plan of the work in general, and the fundamental principle of thoroughness which it tries to teach.

SYSTEM OF DISEASES OF THE EAR, NOSE AND THROAT.—Edited by CHARLES H. BARNETT, A,M: MD., Emeritus Professor of Otology in the Philadelphia Polyclinic; Clinical Professor of Otology in the Woman's Medical College of Pennsylvania. Volume 2, Diseases of tne Nose and Nasopharynx, continued, and Diseases of the Pharynx and Larynx, Illustrated, Philadelphia. J. B. Lippincott Company.

This is an excellent book. It contains twenty-three articles written by as many men well known to the specialist world. It is neat, clear and well arranged typographically. It is well illustrated, there being seventy plates and over two hundred figures. Its encyclopedic nature can be judged from the fact that it quotes from over fifteen hundred authors.

Carl Seiler writes on morbid growths and deformities of the nasal cavities, their pathology, physiology and diagnosis; while Jarvis discourses on the surgery of the same. Bosworth has an unusually good paper on hay fever and White discusses the neuroses of the nose and nasopharynx. Gould gives an article on the reflex influence of the eyes and nose on each other, and Buckley concludes that portion of the work by a paper on skin diseases of the nose.

The following are the authors and titles of the second part of this book: Anatomy and physiology of pharynx and larynx, McCoy of Philadelphia; vocal culture and hygiene, Chapman of New Haven; acute pharyngitis, Thorner, Cincinnati; acute tonsillitis, Bean, St. Paul; chronic pharyngitis, Ingals, Chicago; acute laryngitis, Arnold, San Francisco; croup, Glasgow, St. Louis; diphtheria, J. Lewis Smith, New York; the surgical treatment of croup and diphtheria, Nancrede, Ann Arbor; lupous and leprous laryngitis, Lastra, Galveston; chronic laryngitis, Shurley, Detroit; foreign bodies in larynx, trachea pharynx and esophagus, Roe, Rochester; chronic diseases of the tonsils, Knight, New York; the pharynx in exanthemata and fevers, Lincoln, New York; neurosis and dysphagia, Porcher, Charleston; deformities and morbid growths of pharynx and larynx, Brown, London; tuberculosis and syphilis of the larynx, Solis Cohen, Philadelphia.

From a mere perusal of the subjects handled, as well as the names of the writers, one gets a good idea of the character of the work. Specialists will find it well

adapted to their needs, and any practitioner who wishes to probe these subjects as far as practicable will find this system of great assistance.

TRANSACTIONS OF THE ANTI-SEPTIC CLUB.—Reported by ALBERT ABRAMS, a member of the San Francisco Medical Profession. Illustrated. New York, E. B. Treat, 5 Cooper Union; 1895. $1 75.

We will not repeat the jokes here, for we hope our readers will purchase the book and enjoy it for themselves. It is full of fun and satire, and yet, under it all there is enough of truth to be food for thought. There is plenty of ridicule, and many pet theories receive vigorous left-handed compliments. It is an appropriate work for the office table; patients will enjoy it as well as the profession.

The illustrations are pat. It is an excellent prescription for the medical blues, acting for such conditions as a good *relaxative.*

The July (1895) Number of The Alienist and Neurologist contains: "Was Carlyle Insane? A Study of Race Egotism," by Jas G. Kiernan, M. D.; "Spot Specialism. A Plea for the Treatment of the Entire Patient," by C. H. Hughes, M. D.: "Moral Paranoia," by Martin W. Barr, M. D.; "Paranoia Impotentia Hypochondriaca," by C. H. Hughes, M. D.; together with the usual selections, editorials, review, book notices, etc. Kindly send in your contributions or any items of Neurological or Psychological interest, books for review, etc., for the October number, to Dr. D. S. Booth, 3857 Olive Street, St. Louis. C. H. Hughes, M. D., Editor, 3857 Olive Street, St. Louis, Mo. Subscription: $5.00 per annum; single copies, $1.50.

RENDER THE INTESTINAL CANAL ANTISEPTIC.

The Materia Medica gives at least one safe intestinal antiseptic. It is Salol. Professor Hare, in the last edition of his Practical Therapeutics, says that Salol "renders the intestinal canal antiseptic, and so removes the cause of the disorder instead of locking the putrid material in the bowel, as does opium." He regards Salol as "one of the most valued drugs in the treatment of intestinal affections." Have we a substitute for opium for the relief of pain? Here comes in the American coal-tar products, the first of which, for the relief of pain, stands Anti-kamnia. Therefore, we conclude that to remove the cause, to render the intestinal canal antiseptic, we have an invaluable remedy in Salol; while to remove accompanying pain, to quiet the nervous system and to reduce any fever which may be present, we have a remedy equally efficacious in Antikamnia; *an ideal combination for the treatment of this large class of diseases, and we may specially cite Typhoid Fever.* These two drugs are put up in tablet form, called "Antikamnia and Salol Tablets," each tablet containing two and one-half grains of Antikamnia and two and one-half grains of salol.

WAS MISTAKEN, BUT STANDS CORRECTED.

Messrs. Theo. Metcalf Co., Boston, Mass.

Gentlemen: I thought I was using the best preparation of Kola that I could, but found myself most agreeably mistaken. For smallness of dose and therapeutical effect, KOLA-KOLOID cannot be excelled, if it can be equalled. Yours truly, J. M. ABBOTT, M. D., Macon, Fla.

Samples and literature on application to Theo. Metcalf Co., Boston, Mass.

MONTHLY METEOROLOGICAL SUMMARY.

U. S. WEATHER BUREAU, LOS ANGELES STATION.

Los Angeles, California. *Month of July, 1895.*

Date	TEMPERATURE Max.	Min.	Mean	Precipitation in inches and hundredths
1	77	58	68	0
2	75	59	67	0
3	73	60	66	0
4	75	54	64	0
5	82	54	68	0
6	85	58	72	0
7	84	60	72	0
8	78	60	69	0
9	77	60	68	0
10	75	59	67	T
11	74	58	66	0
12	76	55	66	0
13	80	59	70	0
14	82	60	71	0
15	83	56	70	0
16	81	58	70	0
17	81	59	70	0
18	82	58	70	0
19	79	59	69	0
20	75	55	65	0
21	74	58	66	0
22	77	56	66	0
23	78	58	68	0
24	83	58	70	0
25	82	58	70	0
26	79	60	70	0
27	78	62	70	0
28	77	60	68	0
29	78	59	68	0
30	80	58	69	0
31	81	54	68	

SUMMARY

MONTHLY RANGE OF BAROMETER:

Mean Barometer, 29.95.
Highest barometer, 30.03, date 28.
Lowest barometer, 29.86, date 8.
Mean Temperature, 68°.
Highest temperature 85°, date 6.
Lowest temperature 54°, date 31.
Greatest daily range of temperature 28°, date 5.
Least daily range of temperature 13°, date 3.

MEAN TEMPERATURE FOR THIS MONTH IN

1877	73°	1883	73°	1889	70°
1878	70°	1884	73°	1890	73°
1879	69°	1885	72°	1891	74°
1880	65°	1886	72°	1892	68°
1881	72°	1887	72°	1893	70°
1882	71°	1888	73°	1894	67°
				1895	68°

Mean temperature for this month for 17 years, 71°
Total deficiency in temp. during the month, °
Total deficiency in temp. since Jan. 1. 109°
Prevailing direction of wind, West.
Total movement of wind, 2380 miles.
Maximum velocity of wind, direction, and date, 14m, W. 31st.
Total Precipitation, Trace.
Number of days on which .01 inch or more of precipitation fell, 0.

TOTAL PRECIPITATION FOR THIS MONTH IN

1878	.00	1884	.00	1890	.00
1879	.00	1885	T	1891	T
1880	T	1886	.24	1892	.00
1881	.00	1887	07	1893	.00
1882	.00	1888	.03	1894	T
1883	T	1889	T	1895	T

Average precip'n for this month for 17 years, .03.
Total deficiency in precip'n during month .03 inches.
Total precip'n from Sept. 1,'94, to date, 16.10 inches.
Average precip'n from Sept. 1,'94, to date, 18.35 inches.
Total deficiency from Sept. 1,'94, to date, 2.25 in.
Average rainfall for 10 wet seasons, 21.58 inches.
Number of clear days, 3.
" partly cloudy days, 28.
" cloudy days, 0.

NOTE—Barometer reduced to sea level. "T" indicates trace of precipitation.

METEOROLOGICAL SUMMARY SOUTHERN CAL., JULY, 1895.

STATIONS	TEMPERATURE Mean	Max.	Min.	Mean Barometer	Relative Humidity	RAINFALL Days	Am't	WEATHER Clear	Fair	Cld'y	WIND Direction	Total Mov't
Los Angeles	68.	85.	54	29.95	80.	0	T	3	28	0	W	2,380
San Diego	66.	74.	51.	29.96	77.	0	0	27	2	2	W	4,328
Santa Barbara	65.	79.	54.		81.			17	10	4	E & W	3,428
Yuma	89.	113	67.	29 77	41.	1	.01	27	4	0	SW	5,031
Arlington Heights	69.	98.	48.			0	0	21	10	0	W	
Ontario	75.	97.	61.			0	0	10	21	0	W	
Pasadena	69	90.	51.			0	0	16	15	0	W	
Redlands	73.	99.	58.			0	0				W	
San Bernardino	76.	98.	49.			0	0	20	11	0	W	
Santa Ana	77.	95.	62.			0	0				SW	

OBSERVERS.—George E. Franklin, U. S. Weather Bureau, Los Angeles; M. L. Hearne, U. S. Weather Bureau, San Diego; Hugh D. Vail, Santa Barbara; A. Ashenberger, U. S. Weather Bureau, Yuma. JAMES A. BARWICK, Director California Weather Service, Sacramento, Cal.

REGISTERED MORTALITY OF LOS ANGELES.

WITH SEX AND NATIVITY OF DECEDENTS.

Estimated Population, 80,000. *July, 1895.*

CAUSE OF DEATH	Total Deaths	Annual rate per 1000	SEX		NATIVITY				RACE		
			Male	Female	Los Angeles	Pacific Coast	Atlantic States	Foreign Born	Caucasian	African	Mongol
Deaths from all causes	96	14.40	62	34	8	11	49	27	92	2	2
Deaths under 5 years	13	.....	....	....	....	....	....	....	....	....	....
i. Specific infectious diseases	16	..	9	7	2	3	8	3	16	....	....
ii. Diseases of digestive system	9	..	5	4	3	2	3	1	8	1	....
iii. Diseases of respiratory system	20	.....	16	4	2	2	10	6	19	....	1
iv. Diseases of nervous system	10	.....	4	6	....	....	9	1	10	..	..
v. Diseases of circulatory system, blood and ductless glands	15	.....	11	4	....	1	6	7	14	1	....
vi. Diseases of genito-urinary org'ns	6	.....	4	2	....	....	3	3	5	....	1
vii. Constitutional diseases	2	.....	1	1	....	....	2	....	2	..	....
viii. Intoxication, violence, accidents	6	.....	6	....	....	1	3	2	6	..	....
ix. Miscellaneous diseases	12	.....	6	6	1	2	5	4	12	....	...
i. Septicæmia	....	.....	....	....	....	....	....	....	....	....	....
Pyæmia	1	.....	1	.	....	....	1	....	1	....	..
Diphtheria	....	.....	....	....	....	....	....	....	....	....	...
Erysipelas	....	.....	....	....	....	....	....	....	....	....	....
Typhus fever	....	.....	....	....	....	....	..	....	....	....	....
Typhoid fever	2	...	1	1			2	....	2	....	....
Malarial fever	1	.....	....	1	....	....	....	1	1		....
Scarlet fever	1	...	1	....	1	...	....	....	1	...	....
Measles	2	.....	1	1	1	1	....	....	2	..	....
Cerebro-spinal meningitis	....	.....	....	..	.	....	....	....	....	.	....
Smallpox	....	.....	....	....	....	....	....	....	....	....	....
Tuberculosis	9	....	5	4	....	2	5	2	9	....	....
Influenza	....	.....	....	....	....					....	
Dysentery	....	.....	....	....	....	....	....		..	..	....
Syphilis	....	.....	....	....	....	....	....	....	....	....	....
Tetanus	....	.....	•	....	....	....	....	....	....	..	....
ii Diseases of the œsophagus	....	.....	....	....	....	....	.	....	....	..	....
Gastritis	1	...	....	1	1	1	....	....	1	....	....
Enteritis	1	....	....	1	....	....	....	....	1	....	....
Gastro-enteritis	....	.....	....	....	....	....	....	....	....	....	....
Cholera infantum	1	.....	1	.	1	....	....	..	1	....	....
Peritonitis	2	....	1	1	....	1	1	....	1	1	....
Appendicitis	....	.....	....	....	..	..	....	....	....	..	....
Intestinal obstruction	....	.....	.	..	..	..	....	....	....	....	....
Diseases of liver	3	.....	3	....	....	....	2	1	3	....	....
iii. Membranous croup	....	.....	....	....	..	....	....	....		....	....
Bronchitis	3	.....	2	1	2	....	1	....	3	....	....
Pneumonitis	1	.....	1	.	....	....	1	....	1	....	....
Pleuritis	....	.....	....	....	....	....	....	....	..	..	....
Phthisis	16	.....	13	3	....	2	8	6	15	..	1
iv. Diseases of brain	9	.....	4	5	....	.	8	1	9	....	....
Diseases of spinal cord	....	.....	....	....	....	....	....	....	....	....	....
Eclampsia	....	.....	..	....	....	....	....	....	....	....	....
Epilepsy	1	.....	....	....	....	....	1	....	1	....	....
v. Diseases of heart	13	.....	10	3	....	1	5	7	13	....	....
Degeneration of arteries	1	.....	1	....		...	....	1	1	....	...
Aneurism	....	.....	....	....	....	....	....	....	....	....	....
Anaemia	1	.....	....	1	....	.	1	....	....	1	....
vi. Uraemia	....	.....	....	....	....	....	....	....	....	....	....
Acute Bright's disease	2	.....	1	1	....	....	2	....	2	....	....
Chronic Brigh'ts disease	1	.....	1	....	....	...	..	1	1	....	....
Nephritis	3	.....	2	1	....	..	1	2	2	....	.
vii. Rheumatism	....	.....	....	....	....	....	....	....	....	....	....
Gout	....	.....	....	....	....	....	....	....	....	....	....
Diabetes	2	.....	1	1	....	.	2	....	2	....	....
Inanition	....	.....	....	....	....	....	....	....	....	....	....
Senility and Asthenia	....	.....	....	....	....	....	....	....	....	....	....
viii. Alcoholism	....	.....	....	....	....	....	....	....	....	....	....
Opium habit	....	.....	....	....	....	....	....	....	....	....	....
Suicide	4	.....	4	....	....	1	3	....	4	....	....
Violence and accidents	2	.....	2	....	....	....	....	2	2	....	....
ix. Tumors—malignant	6	.....	2	4	....	1	4	1	6	....	....
Tumors—non-malignant	....	.....	....	....	....	....	....	....	....	....	....
Other diseases	6	.....	4	2	1	1	1	3	6	..	....

F. W. STEDDOM, M.D., Health Officer.

OUR ADVERTISERS.

ELIXIR SIX IODIDES, Elixir Six Bromides, Elixir Six Hypophosphites and Elixir Six Aperiens (Walker Green's) have been made uniform in price; viz., $8.00 per dozen. These Elixirs are rapidly gaining the confidence of the profession. The latest circular can be obtained upon request.

PERFECT CATHARTIC. W. B. Duncan, M. D., Trimble, Tenn., says: "In regard to ELIXIR PURGANS [LILLY] it is what its name indicates, a "perfect liquid cathartic." It has given me the greatest satisfaction, especially with children. Its points of superiority over anything I have ever used are three fold, viz: pleasanter to take, prompt action and no griping.

A STRANGE PHENOMENON OCCURRING IN A CASE OF GONORRHEA. I have been prescribing Sanmetto in nearly all urinary diseases for the past four years. I treated a case of gonorrhea about three years ago, the result of which is without parallel. After treating the case four days considerable hemorrhage occurred; then followed the strangest phenomenon I have ever seen or read of—strings of muco-purulent consistency, resembling chicken guts, over a yard long passed from the urethra. This peculiar condition lasted several days, when I thought of Sanmetto. After taking teaspoonful doses of Sanmetto every four hours for twenty-four hours he was relieved of the trouble, and recovered rapidly afterwards, using only two bottles. I should have reported this case sooner, but neglected it. I still prescribe Sanmetto when indicated. I. N. DAWSON, M. D., Duncansby, Miss.

ACUTE MANIA, By W. H. DEWITT, M. D. Extract from a paper read before the Academy of Medicine of Cincinnati, May 12, 1895. The medical treatment of these cases is very simple, and can be disposed of in few words. To procure sleep and quiet is perhaps the greatest desideratum, and I know of nothing so certain in its action as chloral hydrate, given in 40 or 60 grains. It may be given alone or combined with one of the bromides. The "Bromidia" of Battle & Co. I have always found very reliable. It is almost certain to quiet and produce sleep. You will occasionally meet with cases that resist the influence of chloral even in large repeated doses, here opium or its derivatives, either given alone or in connection with the chloral, will be found of service. If hypodermically administered, not less than ½ gr. should be given. Small doses only excite the patient, and do more harm than good. Hydrobromate of hyoscine has some advocates. The milder hypnotics, such as sulfonal, chloralamid, etc., are not to be thought of in these cases; they are practically inert, and do no good. *Lancet-Clinic, June 22, 1895.*

SOUTHERN CALIFORNIA PRACTITIONER.

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ORIGINAL.

PHYSIOLOGICAL CHEMISTRY.

BY F. D. BULLARD, A. M. M. D., LOS ANGELES, CAL.

PROFESSOR OF CHEMISTRY AND TOXICOLOGY, MEDICAL DEPARTMENT OF THE UNIVERSITY OF SOUTHERN CALIFORNIA.

Physiological chemistry is the science which treats of the ingredients of the human body, of food, and of excretion. It discusses them not as some of the fourteen elements of which the body is composed, but rather as *proximate principles*; that is, as elements or group of elements which can be separated as such without loss of characteristic properties. Although carbon makes up more than one-eighth of the human body, it is found only in combination as carbonate, hydrocarbon or carbohydrate. It is of such physiological ingredients which exist under their own form that this branch treats. It also has to do with foods, their classification and composition. It tells how the non-diffusible ingesta become so changed by the digestive processes as to be absorbed into the system. It describes the intermediary products within the body, and discusses the form and avenue of discharge from the body. It defines food as material taken into the body to repair waste, build up tissue and produce energy. It classes food stuffs into four groups:

1. Inorganic, including salts and water.
2. Carbohydrates, the starches and sugars.
3. Fats or oils.
4. Proteids, or nitrogenous foods.

Physiological chemistry shows that proteids are developed into all forms of bodily tissue, yield heat, energy, muscular and glandular activity, and are excreted from the body as urea, uric acid, creatinin, carbon dioxide and water; while the starches, sugars and fats yield to the body, heat, energy, rotundity, act as lubricating agents, and are excreted from the body as carbon dioxide and water.

Physiological ingredients are organic or inorganic; the latter are water, salts of sodium, potassium, calcium, magnesium and ammonium; also iron and silicon, and several gases, oxygen, hydrogen, nitrogen, marsh gas, ammonia, hydrogen sulphide, hydrochloric acid and carbon dioxide.

Water, with the exception of enamel of the teeth, where it forms 1-10 of 1 per cent., makes from 20 per cent. (in bones) to 99 per cent. (in saliva) of the solids and liquids of the body, causing the fluidity of the latter and being essential to the functions of the former. Its source is from solid foods (3½ pints per diem) from chemical changes in the body (¾ pint) and from liquids drank which ought to equal the other two. Solid foods contain varying amounts of water, from one-third in bread to nine-tenths in green vegetables. Water is excreted as such, holding salts in solution and aiding in the elimination of various deleterious substances, as follows: Forty-six per cent. by the kidneys, 30 per cent. by the skin, 20 per cent by the lungs, and 4 per cent. by the intestines.

Drinking water should be pure and not too hard, a quality due to lime, which, if present in too large amounts, is liable to produce indigestion. It is a mistake not to take liquids with food; for, being to a great extent immediately absorbed, they contribute to the formation of the required gastric juice; besides enabling the stomach to handle its contents easier. The chief sources of unwholesomeness of water are excess of salines, organic impurities and lead contamination. The presence of chlorides, can be determined by the reaction with nitrate of silver; after acidulating with a few drops of nitric acid, as long as the soluble chlorides are present, they will be precipitated as a white substance.

$$Ag\ NO_3 + NaCl = Ag\ NO_3 + Ag\ Cl$$

and if potassium chromate be added as an indicator as soon as this reaction ceases the silver will form a red or orange chromate:

$$2\ Ag\ NO_3 + K_2\ CrO_4 = Ag_2\ CrO_4 + 2KNO_3\ .$$

If the standard solution be one gramme of $Ag\ NO_3$ to 401 c. c. of distilled water, and if 50 c. c. of the test water be used, the number of c. c. of the standard solution will tell the number of grains of NaCl to the gallon.

Water acidulated with hydrochloric acid will throw down the sulphate on the addition of $Ba\ Cl_2$. Lime will be precipitated in the form of the oxalate, $Ca\ C_2\ O_4$, on the addition of a few drops of the hydrate, chloride, and oxalate of ammonium.

The comparative hardness of water can be ascertained by agitating it with a standard soap solution, and noticing how much of the solution is used up, before permanent lather is formed, and the water sounds and feels soft. The standard soap solution is made by comparing a strong solution of soap in hot dilute alcohol as against a carbonate of lime solution—one gramme $CaCO_3$ dissolved in HCl (with acid excess evaporated), and diluted to one litre of water. If rightly balanced 23 c. c. of soap solution will equal 10 c. c. of the lime, then each c. c. of the soap solution will equal a quarter of a grain of $CaCO_3$ in one gallon of water.

The carbonates, bicarbonates and sulphates of lime and magnesium are objectionable for manufacturing, laundry, and if in considerable quantities, for drinking purposes. The bicarbonates are removed by boiling; the others must be neutralized by some alkali, washing soda or ammonia, but for drinking can be gotten rid of only by distillation.

Organic impurities are traced by the presence of nitrogenous matters and an excess of chloride in the water. They are found as free ammonia, albuminoid ammonia, nitrites and nitrates. Ammonia is detected by the yellow or brownish color produced on the addition of a few drops of Nessler's solution (an alkaline solution of mercuric iodide in potassic iodide.) The reaction may be:

$$Hg\ I_2 + 2NH_4\ HO = NH_2\ HgI + NH_4\ I + 2\ H_2\ O.$$

The presence of ammonia indicates fresh contamination, the nitrites indicate a transitional stage, and the nitrates represent the final oxidation. The nitrates are estimated by the depth of yellow color produced by phenol-sulphonic acid (a solution of carbolic acid in twenty times its bulk of sulphuric acid.)

$$C_6 H_5 OH + H_2 SO_4 = C_6 H_4 OHSO_3 H + H_2 O$$

$$C_6 H_4 OHSO_3 H + HNO_3 = C_6 H_4 OHNO_2 + H_2 SO_4 .$$

Mono-nitro-phenol.

The color is intensified by an excess of alkali. Boiling water destroys organic impurities; charcoal filters remove suspended matters and distillation renders it strictly pure, but makes it flat and disagreeable to the taste, and very liable to contamination if exposed to lead.

Sodium chloride, present to the extent of 4½ ounces in all fluids and solids of the body, promotes osmosis, holds globulins in solution (a most important function), and aids in excretion; it is taken into the body as food and as a condiment. The daily income and discharge is 225 grains.

The alkaline phosphates ($Na_2 HPO_4$ and $K_2 HPO_4$, phosphoric acid being tribasic and the bimetallic and normal salts being alkaline), and alkaline carbonates ($Na_2 CO_3$ $Na HCO_3$ and $K_2 CO_3$), the former from animal and the latter from vegetable food, are the salts which give alkalescence to all the fluids of the body but four, gastric juice, urine, perspiration and vaginal mucus, which are acid. The tartrates and citrates of sodium and potassium of various vegetables (potatoes, carrots), and fruits (apples, cherries, lemons), are absorbed and changed into alkaline carbonates in the blood. The phosphates are discharged in perspiration, mucus and urine, in the latter both as alkaline phosphates and also as sodium biphosphate ($NaH_2 PO_4$), which gives that excretion its acidity.

The sulphates of sodium and potassium are found in small quantities in various body fluids; and are discharged by the urine. Sulphur occurs in fresh eggs and cereals; on being oxidized it forms sulphuric acid, which, being stronger, replaces carbonic acid, forming sulphates with alkaline bases.

Next to water calcium phosphate ($Ca_3 (PO_4)_2$) is the most important inorganic ingredient in the body. It gives rigidity to bones, of which it forms 57 per cent., the flexibility or brittleness of bones depending on the varying amount of this salt. It is derived from eggs, milk, wheat, rice, peas, beans, potatoes, apples and cherries. Adulteration of milk with water may deprive a child of the needed lime salt. It is discharged in small amounts, via urine, faeces and perspiration. Associated with this salt are the carbonates of calcium and magnesium. Calcium fluoride occurs in bones and teeth, but is of slight importance. Potassium chloride and ammonium chloride are found in the gastric juice and in the urine.

Iron is found in the haemoglobin of the blood, in the hair, in bile and in urine. Its most important function is to enable the haemoglobin to take up oxygen and become the oxyhaemoglobin of arterial blood. It is derived from animal food, rye, barley, oats, wheat, peas and strawberries. It is discharged in bile and in urine to a small extent, and deposited in hair.

The gases, oxygen and nitrogen are absorbed from the air, hydrogen and marsh gases from the intestines, and are found in the expired air, ammonia and carbon dioxide are also found in expired air, and are derived from the blood; hydrogen and hydrogen sulphide are found in the intestines; carbon dioxide exists in many of the body tissues.

The organic physiological ingredients are carbohydrates, fats, proteids, albuminoids, enzymes; intermediate products, waste products and coloring matters.

Plants, in the presence of solar light and by the aid of chlorophyll, form starch from carbon dioxide and water setting free oxygen.

$$6CO_2 + 5H_2O = C_6H_{10}O_5 + 6O_2$$

Carbohydrates ($C_m H_{2n} O_n$) contain at least six carbon atoms, and hydrogen and oxygen in the proportion to form water. They are neutral in reaction, form loose combinations, especially with bases, and, naturally, or after some reagent, have a sweet taste, rotate polarized light, reduce metals in solution, and undergo alcoholic fermentation. Some as cane sugar are crystallized, and others as starch are colloid. They are divided into groups according to the number of carbon sixes: *glucoses* or mono-saccharids ($C_6 H_{12} O_6$) including dextrose, laevulose, galactose; *saccharoses* or disaccharids ($C_{12} H_{22} O_{11}$) sucrose, lactose, maltose; amyloses or polysaccharids n ($C_6 H_{10} O_5$) starch, glycogen, dextrin and gums.

Starch is found in the vegetable kingdom, especially in seeds, roots and tubers; it is found as granules, starch granulose, covered with thin husks, starch cellulose, and supported by a frame work of cellulose. Hence starch grains are quite insoluble in cold, while readily so in hot water; heat or chemical reagents causing the starch cellulose to peel off. The test is the formation of the blue iodide of starch by the action of iodine on starch granulose. Cellulose can be separated from starch by grating and thoroughly washing a potato, the washed pulp being cellulose with some starch and the white residue starch; their arrangement can be examined in a thin section of potato, the oyster marked starch granules lying inside the cells made by cellulose; it is especially plain if the section is slightly stained by a weak iodine solution. A caustic alkali or boiling water will form starch paste. If this paste be mixed with a few drops of a solution made of a half drachm each of iodine and iodide of potassium, to four ounces of water, a deep blue color results which disappears (1) if heated gently, to return when cold unless the I has been driven off, (2) on the addition of KOH returning if HCl is added or $AgNO_3$ or $HgCl_2$ in solution be added. Cellulose itself becomes gelatinous in KOH, turns brown and dissolves in H_2SO_4, and completely so in warm cupric hydrate solution, from which it is reprecipitated as a stringy substance on the addition of dilute HCl. Cellulose, except in young vegetables, is unaffected by human digestive ferments, but the colloid starch is changed into crystallized dextrin, maltose or glucose by the action of the amylolytic ferments ptyalin of the saliva and amylopsin of the pancreatic juice. As ptyalin has but slight effect on raw starch, such foods should be thoroughly cooked, and as the action is stopped by tannin, tea should never be drank during mastication; strong acids or alkalies have a similar effect.

In breaking the complicated starch into a simpler glucose or saccharose molecule, intermediate substances are formed. Tests:

1. Initial substance. Soluble starch. Blue with iodine.
2. } Intermediate. } Erythrodextrin. Red with iodine.
3. } Substances. } Achrodextrin. Negative.
4. Final product. Dextrin and sugar. Yellow ppt. on boiling w. Cuso4 &KOH10.

$$10C_{12}H_{20}O_{10} + 8H_2O = 8C_{12}H_{22}O_{11} + 2C_{12}H_{20}O_{10}.$$
Starch Maltose Dextrin.

This change is called hydrolysis.

Saliva contains water, and salts (NaCl, $CaCO_3$ $Ca_3(PO_4)_2$ and KCNS, shown by red coloration with Fe_2Cl_6). It is the calcium salts that produce salivary calculi and tartar. Saliva dissolves sapid substances, and has a mechanical use, moistening food and thus aiding mastication and digestion. It is normally alkaline.

Dextrin is more or less valuable as a food, being partially digested, it is found in various infants' foods, also in crusts of bread and toasted bread. It can be

prepared by heating powdered starch till it is brown. Closely allied to dextrin is glycogen or animal starch, which is found chiefly in the liver, and also in the skin, mucous membrane, white blood corpuscles, and in oysters. It is the stored up carbohydrate food derived from maltose and glucose of the portal vein and destined as needed to become dextrose or liver sugar, in which form it can be utilized in the system. It gives a wine red reaction with iodine, disappearing on heating to become visible again on cooling.

Of greatest importance normally and pathologically are the glucoses. They are *dextrose*, otherwise known as glucose, grape sugar, corn sugar and diabetic sugar, *laevulose*, fruit sugar or mucin sugar, *galactose* made from lactose by action of dilute acids or ferments, and *inosit* or muscle sugar, which latter quite likely belongs to the benzol series. Of all these, dextrose demands the most attention. It occurs widely in the vegetable kingdom, especially in sweet fruits, grapes, prunes, figs, raisins, in honey, raw sugar, molasses and gums. Although it may be derived from the peptones its usual ancestry in the blood is through glycogen from invert sugar, from cane sugar, or glycogen from maltose, from starch. It answers to Böttger's, Moore's, Fehling's, Haine's and fermentation tests for sugar. It undergoes various fermentations; by yeast it becomes alcohol and carbon dioxide.

$$C_6 H_{12} O_6 + \text{ferment} = 2C_2 H_5 HO + 2CO_2.$$

Milk in souring changes its sugar to lactic acid.

$$C_6 H_{12} O_6 + \text{ferment} = 2 (C_3 H_6 O_3)$$

and this undergoes still further decomposition into butyric acid, hydrogen and carbon dioxide

$$2C_3 H_6 O_3 = C_3 H_7 COOH + 2CO_2 + 2H_2.$$

When the diet is largely of carbohydrate these fermentations occur in the alimentary canal. The alcohol by oxidation may become aldehyde and the aldehyde, acetic acid.

$$C_2 H_6 O + O = C_2 H_4 O + H_2 O$$
$$C_2 H_4 O + O = C_2 H_4 O_2$$

The saccharoses of much importance in physiological chemistry are *sucrose*, otherwise known as saccharose or cane sugar, *maltose* or malt sugar, and *lactose* or milk sugar. These are half way between the glucoses and starches, they are crystalline, diffusible and readily undergo hydrolysis. Cane sugar is a food, under the influence of the intestinal enzyme, invertin, it becomes a mixture of dextrose and laevulose, invert sugar.

$$C_{12} H_{22} O_{11} + H_2 O + \text{ferment} = C_6 H_{12} O_6 + C_6 H_{12} O_6.$$

By the action of acids also it is changed to invert sugar. Maltose can be distinguished from dextrose by the fact that the latter reduces Barfoed's reagent—cupric acetate in water and acetic acid. It is probable that both maltose and lactose are converted into dextrose in the process of absorption. Cane sugar occurs in the body only as a food.

The essential of diabetes mellitus is the presence of dextrose in an excessive amount of urine. Accompanying this there may be any or all of the following conditions: hunger, thirst, weakness, emaciation, lowered temperature, and various nervous disturbances, such as somnolence, neuralgia, paresthesia, sudden perspiration and coma. It is a perverted state in which certain foods, notably starches and sugars, fail to reach their normal destination in the economy. This may be due to (1) faulty activity of the renal epithelium, (2) abnormal functionating of the liver, either defective formation, of glycogen or an accelerated conversion of the same into liver sugar, (3) disturbances of the pancreas or (4) to some ault in the nervous system.

Two other important substances are sometimes found in diabetic urine, acetone or dimetlyl ketone $\begin{matrix}CH_3\\CH_3\end{matrix} \succ CO$, and ethyl diacetic acid $\begin{matrix}C_2\,H_5\,CO\\C_2\,H_5\,CO\end{matrix} \succ O$. Both are probably due to albumin decomposition. Acetonuria also occurs in high fever, carcinoma, and severe mental troubles; it causes restlessness, excitement and delirium, it precedes diaceturia, which is almost a certain prelude of coma. Acetine can be detected by the evolution of iodoform when urine is floated on a boiled solution of KI in KOH; ethyl diacetic acid is shown by a red color on the addition of a few drops of Fe Cl2, to boiled urine. The ethereal odor of diabetic urine is due to acetone.

The above are derivatives of acetic acid which are frequently produced in fermentation of food in the stomach. Acetic acid $CH_3\ COOH$ belongs to the fatty acid group, the first member of which is formic acid HCO, OH which occurs in spleen, thymus gland, pancreas, muscles, brain, blood and urine. The third of the series propionic acid $C_2\,H_5\ COOH$ occurs in perspiration, diabetic urine and sometimes in stomach, as it is formed during acetous fermentation. The fourth number ($C_3\,H_7\ COOH$) butyric acid and isobutyric $\left(\begin{matrix}CH_3\\CH_3\end{matrix} \succ CH\ COOH\right)$ acid occur in the faeces, the former also in perspiration and lactic fermentation, and the latter is a product of proteid putrefaction. The fifth of the series is wanting, but the sixth caproic and the eighth caprylic occur in perspiration, these two with the tenth, capric, are found in butter.

All the above acids are monobasic and monatomic and are acids of the first series or paraffines, two, *lactic* acid found in the alimentary canal, in muscles and in the brain, and *sarcolactic* acid, found in blood and muscle, giving the latter its acid reaction, are monatomic acids of the second or olefin series.

Closely allied to the fats is cholesterin, an alcohol, found in bile, white nervous matter and crystalline lens, it is found in Indian corn, egg, wheat, peas and beans. It is seen in biliary calculi, and in the urine in diabetes and icterus.

Olein a liquid fat, palmatin a soft, and stearin a hard solid are really compound ethers of glycerin $C_3\,H_5$ III and the corresponding acid. All fats are mixtures of these three varieties, palmatin predominating in man, stearin in the herbivora, and olein in fish. The acids are monobasic and members of the first series. The fats are derived from the fats, from starches and sugars, fatty meats, nuts, eggs, and milk. They protect the body, serve as lubricators, retain vital heat, act as reservoir of food, and are a source of energy and of heat through oxidation. Fats are saponifiable and emulsifiable. The fats are emulsified by action of the intestinal juice and the bile, and are saponified by the steapsin ferment of the pancreatic juice. That is, under the influence of steapsin, palmatin unites with water to form glycerine and palmitic acid, then palmitic acid unites with the carbonate of soda of the pancreatic juice to form a diffusible soap, sodium palmitate, water and carbon dioxide, thus:

I. $C_3\,H_5\ (C_{15}\,H_{30}\,COOH) + 3H_2\,O = C_3\,H_5\,(OH)_3 + C_{15}\,H_{31}\,COOH.$

II. $2\,(C_{15}\,H_{31}\,COOH) + Na\,CO_3 = 2C_{15}\,H_{31}\,COOH + H_{20} + CO_2.$

Proteids are nitrogenous bodies which answers to the following reactions: (1) turn yellow on boiling with HNO_3, color deepened on addition of strong KOH, (2) on boiling with Millon's reagent become red, (3) give a violet color to a little copper sulphate in potash solution. *Native* albumens and globulins coagulate on boiling, the latter are precipitated by a solution of $MgSo_4$, while ether causes a precipitate with egg and not with serum albumen; the *digestion* albumens are not coagulated by heat, the *acid* and *alkali* albumens are thrown down by neutralization, *albumoses* are precipitated by saturation with ammonium sulphate and

peptones are not. Pepsin, the unorganized proteolytic enzyme of the gastric juice, changes proteids to absorbable peptone. It does this by means of several phases, quite likely as follows: proteid, acid albumen, albumose, albumose and peptone; trypsin, the pancreatic enzyme acts on proteids in an alkaline medium, having alkali-albumen as the intermediary product. A derived albumen, casein, is coagulated by a milk curdling ferment of the stomach called rennin. The globulins are crystallin, vitellin, paraglobulin, serum globulin, fibrinogen, myosin and globin.

There are five bodies called albuminoids, mucin, gelatin, chondrin, elastin and keratin found in mucus, connective tissue, cartilage, elastic tissue and horny substances respectively, all non-diffusible and non-crystallizable but marked out by some distinguishing characteristic. Of these the most important is mucin, which is differentiated from serum albumen by its coagulation with acetic acid. Collogen and ossein are the progenitors of gelatin.

There are seven bodies resembling proteids in composition, which have the property of causing changes in other bodies without any affect on themselves. They are the unorganized ferments; three of them, pepsin, trypsin and rennin are from corresponding zymogens; all but one, pepsin, work in alkaline media; two, ptyalin and amylopsin act on starch, the former on cooked, the latter on raw starch, changing it to sugar; one, invertin, changes cane to invert sugar; one, rennin, of gastric juice coagulates milk; one, steapsin, of pancreatic juice splits fats into glycerine and fatty acids; and two, pepsin and trypsin, convert proteids to albumose and peptone, the trypsin continuing and supplementing the action of pepsin. They are all soluble in glycerine and water and precipitated by alcohol. Hence do not give pepsin in an alcoholic meustruum. They act best at body temperature. They are called enzymes, and their action zymolysis.

There are some byproducts in the body, such as sodium glycholate and sodium taurocholate, bile salts, which with the corresponding acids exist in the bile. The latter acid precipitates proteids and pepsin, and hence allows a better action of the intestinal enzymes. Bile assists in the emulsifying of fats, stimulates muscular activity of bowels, is antiseptic, and to some extent an excrementitious fluid. Cane sugar added to bile and sulphuric acids produces a cherry red to a purple color. Lecithin, cerebrin and protagon found in the brain, and other tissues, are intermediate products.

The elimination of used up and useless matter takes place via kidneys, skin, lungs, and intestines. Only a relatively small amount of the floating balance of nutritive matter becomes the fixed capital of living protoplasm. This floating proteid and the disintegrated tissues are converted mostly into *urea* by means of the liver chiefly, and to a less extent through the spleen and lymphatic glands; the vehicle of nitrogenous discharge may be to a lesser degree by *uric acid* formed in the liver and spleen and excreted by the kidneys; and by *creatinin* which is a strong base derived from the creatin of the muscles. These nitrogenous bodies are found in the urine, two others, leucin and tyrosin are formed in the intestines and being absorbed, they aid in other processes, the leucin helping in the production of glycogen, and tyrosin that of urea. The change from proteid to urea is through intermediate processes, the original albuminoid breaking up, according to the supply of oxygen, into bodies of higher or lower oxidation, into urea, uric acid, creatinin, lactic and oxalic acids, glucose, carbon dioxide, water, and sulphuric acid, the latter always appearing in the urine in the form of sulphates.

By far the most important article of nitrogenous export is urea, carboxyl diamide $CO\ 2(NH_2)$. This substance is isometric with ammonium carbonate into which it is changed by alkaline fermentation, $CO\ (NH_2)_2 + H_2O = (NH_4)_2\ CO_2$

and by still further decomposition it turns to CO_2 and N, hence the volume of N can be used in estimating urea. Doremus' ureometer is constructed on that principle, urea coming into contact with sodium hypobromite is decomposed, the CO_2 being absorbed by the solution, and the N being confined as a measure of the amount of urea.

$$CH_4 ON_2 + 3Na BrO = CO_2 + 2H_2 O + 3Na Br + N_2$$

Of the compound ureas, uric acid $H_2 C_3 H_2 N_4 O_3$ is the most important, it is a dibasic acid and hence forms two series of salts, the normal or neutral and the acid, the neutral salts are readily soluble, while the acid ones are feebly so. The arthritic calculus of gouty individuals is the neutral sodium urate. Calcium urate occasionally occurs in urinary sediment and in "chalk stones," the acid ammonium urate is found in alkaline urinary sediments and in calculi. Other compound ureas, xanthin, hypoxanthin and allantoin occur occasionally and in small quantities in the urine. Indol ($C_8 H_7 N$) and skatol ($C_7 H_9 N$) from the decomposition of proteids occur in the faeces and contribute to their peculiar odor.

There are various coloring matters, the most important of which are haemoglobin, oxyhaemoglobin of the blood, bilirubin and biliverdin of the bile, and urobilin and urochrome of the urine. Bile pigments are recognized in the urine by a play of color in which green is the distinctive one, produced by the action of several reagents.

701½ S. Broadway.

THE RECTUM.

BY W. B. WOOD, M. D., ORANGE, CAL.

Throughout all the ages of the past, like the great deserts of Africa and the much talked-of North pole, the rectum has remained, comparatively, an unexplored region of the human system. It has been entered by many a physician's finger, and its hidden maladies touched, but to the eye it was as midnight darkness. Although we live in an age of steam locomotives, electric lights, telephones, lightning presses, reapers and mowers, when every department of science, of architecture and business is moving forward with great rapidity, it seems that in this branch of medical literature the surgeons of the present day have made but little if any advance on that pursued by Hippocrates, the great founder of medicine, and even now, it is no uncommon thing to hear members of the medical fraternity assert, boldly, that diseases of the rectum and the reflexes resulting therefrom are a myth and belong to the realms of quackery. "Our fathers so said, and so say we," but such persons greatly err. The days of ignorance and antedeluvian ideas are passing away. The world is no longer flat. The electric flash has become the servant of man. The traveler moves with the speed of the wind. Man lives for a purpose; and that purpose is to advance.

Dr. James Thatcher, in his biography of American physicians, says: "The melancholy triumph of disease over its victims, and the numerous reproachful examples of medical impotency clearly show that the combined stock of ancient and modern learning is insufficient to perfect our science. Far indeed beneath the standard of perfection, it is still fraught with deficiencies and altogether inadequate to our desires."

Prof. Henry Smith, of England, in his work on Surgery of the Rectum, says: "Diseases of the rectum are perhaps, as common in their occurrence as any which afflict man, and as a rule their pathology, symptomatology, diagnosis and treatment are not well understood. In a majority of cases they give rise to a degree

of suffering, accompanied with anxiety of mind and mental depression which are wholly out of proportion to the gravity of the local disorders themselves, and there are few diseases more amenable to treatment when properly appreciated, or which in their results, give greater satisfaction to the practitioner. However, when such diseases are treated on the expectant plan, or when an attempt is made to manage them by calling everything in the region of the anus, piles, and blindly prescribing ointments, lotions and laxative mixtures, there are few diseases likely to prove more obstinate, or to bring greater reproach upon the skill of the physician."

Prof. Van Buren, in his lectures on Diseases of the Rectum, says: "These diseases are among the most common and painful you will have to encounter in ministering to the ailments of humanity." Prof. Allingham, says: "Diseases of the rectum are among the most common that affect civilized humanity. The majority of these afflictions are very amenable to proper treatment, the amount of benefit that can be conferred by a well skilled surgeon is really remarkable, but there is the opposite proposition to be considered, when diseases of the rectum are neglected, or when the surgeon pursues a routine or guess-work course, cures do not frequently result. I am still constantly called upon to see patients who have been a long time under the treatment of qualified practitioners, and for whom medicine and ointments have been plentifully prescribed, yet no proper examination has been made; perhaps only a look has been vouchsafed, and the disease diagnosed and treated as *piles*, when fistula or ulceration, or even malignant disease has been present."

Dr. Bodenhamer, says: "The rectum heretofore has been a *terra incognita* in the domain of surgery into which the practitioner has not cared to venture." Dr. Ashton says: "In the whole range of surgical pathology, no class of diseases among civilized communities is so prevalent, causes so many varying and distressing sympathetic affections as those of the rectum, but, none succumb more readily to judicious treatment."

There is no cause of suffering that affords to the general practitioner more of his financial success than chronic affections of different members or organs of the human system resulting from diseases of the rectum, and yet how few physicians give them attention, or have the instruments by which to discover such disease without pain, or at all. You may travel the country over and you will seldom find a physician, although, only a boy comparatively in years, who is not prepared at a moment's notice, to make a full and complete examination of the vagina and uterus. And yet, while the cause of the uterine trouble may be found by the aid of proper specula, in the rectum, no provision whatever has been made for such explorations. Why should this be? The physician who seeks the welfare of his patient should not couple curiosity with all such acts. He should remember that there are at least twice as many rectums as wombs, and that there are scores of rectal diseases to one uterine disease, as well as that most of the uterine diseases result from greater troubles in the rectum, and that while they are steadily failing in treatment of effects of causes only, there need be no failure if they commence with the cause of the trouble. The time has fully come when physicians should be as desirous to examine the rectum as the uterus, and when such is the fact many fountains of sorest affliction will be dried up, and the field of the practitioner greatly extended, and the days of his greatest usefulness be near at hand. The construction of the human body that walks the earth today is identical with the models according to which all preceding generations of men have been constructed. Every human being possesses two nervous systems, a cerebro-spinal, which presides over conscious sensations and voluntary activities,

and a sympathetic, which superintends all organic functions, ministering perpetually to bodily wants and having in charge what we now recognize as all involuntary processes of life, such as the circulation of the blood, the digestion of food and its distribution to the tissues, and all processes known as secretion and excretion, by means of which the body attains its growth and secures the necessary repairs for its continual existence.

The human body is a bundle of nerves and reflex actions. Any irritation in any one part is liable to produce an irritation in some other part, the nature and locality of which will depend upon the degree of irritation and the constitution of the individual. This is true of all parts of the body, on the surface, or beneath the surface and of all the organs. There are certain organs, which on account of the complexity of their nerve supply, are pre-eminently centers of reflex irritation. Among the most conspicuous of these reflex centers are the stomach, the intestines, the liver, the uterus, the ovaries, the prostatic urethra, and the eyes. Next to the stomach in point of importance as a reflex center, are the uterus and the ovaries in the female, and the prostatic urethra in the male. These organs are naturally so physiologically and anatomically. And the close relationship of the uterus and ovary and the prostatic urethra to the rectum, readily explain how these centers may be and are disturbed by any disease of that organ. These reflex disturbances take place not only through the ordinary motor and sensory nerves, but through the sympathetic and vaso-motor nerves. The nerves supplying the rectum are derived from the cerebro-spinal (third and fourth sacral nerves) and sympathetic. It is unique in that it is the only portion of the intestinal canal which is supplied by a spinal nerve, and the sphincter ani is more richly provided with nerves than any of its class or in fact than any other muscle in the human body. The intimate connection and close relationship, therefore, of the sympathetic system to the sexual organs, the stomach, liver, heart, spine, and the brain show what organ or organs would be affected by any irritation that would derange or disturb its equilibrium. The irritation from a small rectal ulcer, or the pressure exerted by internal hemorrhoids or polypi, acts as excitants to the sympathetic and cerebro-spinal nerves. The hardened semi-cartilaginous cicatrix in an old lacerated cervix acts as an irritant or foreign body, and produces that long train of annoying, unyielding and unremediable nervous symptoms, which disappear only when the cause, the hardened cicatrix, is removed. The elongated prepuce, with its accumulated smegma causes many and serious nervous disturbances in the young and old. Remove the elongated prepuce by circumcision, and the convulsions stop, the various nervous disturbances disappear, and the paralysis becomes better. The young man who has lived a fast life and who is suffering from a sensitive prostatic urethra, with the attendant symptons of nervous exhaustion can be promptly cured by treating the diseased urethra; just so with persons suffering from rectal irritation; divulse the sphincters, remove the hemorrhoids and pockets, heal the rectal ulcer, and the patient, who has been apparently hopeless, will recover slowly, but surely. The intimate connection which is maintained between the vital centers and the lower portion of the rectum and its sphincters, through their extensive nerve supply, is demonstrated at every operation upon these parts. All who have had experience in rectal surgery will recall, that however profound the anesthesia, divulsion, unless accomplished with extreme care and deliberation, invariably produces stertorous respiration, profound modification of heart's action, immediate congestion of the cutaneous capillaries, and muscular contraction and rigidity sometimes amounting to opisthotonos. Until very recently the subject of reflexes has received nothing like systematic investigation and study, and the prediction that

we are merely upon the threshold of discoveries to which the above will form but an imperfect introduction, is more than idle dreaming. The benefits which have already resulted are great. The crises in which rectal reflexes have proven themselves effective and the light and hope which they have incidently cast upon epilepsy, a heretofore all but hopeless disease, are sufficient to call for grateful recognition and inspire a more sympathetic and exhaustive investigation of the entire subject.

PERIPHERAL NEURITIS. *

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A score of years ago inflammation of the peripheral nerves, except from actual trauma, was believed to be a very rare disease; but more recent investigation has shown that it is a very common pathological condition. The inflammation may involve the perineurium and interstitial connective tissue, and is called peri-neuritis; or it may be limited to the nerve fibres themselves, when it is called parenchymatous neuritis; or it may be of the diffuse type involving both the connective tissue and the nerve fibres. In perineuritis the inflammation is usually sufficient to produce so much pressure as to cause more or less destruction of the nerve fibres themselves. Hence the clinical symptoms in either form are substantially the same. The naked eye appearance differs somewhat in neuritis. In perineuritis there is often sufficient increase of connective tissue to be quite apparent, so that the nerve may be felt as a hard cord when it lies in exposed positions. As a result of this increase of the connective tissue complete recovery from sensory disturbance is rare, but the recovery of motor power may be quite rapid. If the inflammation has been severe enough to destroy the axis-cylinders of the nerve, the process of the degeneration of the nerve fibre is usually complete in two or three weeks, and in favorable cases is followed by regeneration, which may require a period of two years, and often is never complete. In the parenchymatous form there is very little change in the naked eye appearance of the nerve. The pathological change in peri-neuritis is an infiltration of white corpuscles, and sometimes of blood corpuscles, in the perineurium and endoneurium, which breaks up the myelin of the nerve fibre, and sometimes destroys the axis-cylinder of the fibre itself.

In parenchymatous neuritis the connective tissue is unaffected, but degeneration of the Wallerian type takes place in the nerve fibre. In the diffuse type both of these conditions exist.

The axis-cylinders of peripheral nerves are the prolongations of the process of motor, sensory and trophic cells, and are all found in varying proportions in each spinal nerve. Rarely are all the fibers of the nerve so involved in the inflammatory process of neuritis as to undergo degeneration; but ordinarily enough of each kind are involved to cause motor, sensory and trophic symptoms. But the involvement may be such that either the motor or the sensory, or the trophic symptoms may greatly predominate.

The inflammation is not usually equally severe throughout the length of the nerve, but is distributed in patches, usually being most severe where the nerve emerges from a bony canal, or passes through fasciæ. In considering the symptoms of neuritis it is well to bear in mind that there is probably a physiological difference in motor and sensory impressions, and that a slighter degree of con-

* Report of Committee on Neurology, read before the State Medical Society, at San Francisco, April 17, 1895.

duction may arouse the sensory centers than will suffice to arouse the motor centers in the brain.

The symptoms of neuritis are usually a numbness, tingling and a pain of burning, boring, radiating character, beginning in the most distant portion supplied by the affected nerve; and through these sensory disturbances may extend to the whole area supplied by the affected nerve, they continue most marked in the distal portions. Depending upon the intensity of the inflammation there will be loss of motor power, varying from slight paresis to complete paralysis; diminution or loss of the reflexes; and the muscle loses its faradic irritability, while its galvanic irritability is increased. Instead of the typical reaction of degeneration there is sometimes loss of reaction to both the faradic and galvanic currents; or again there is an early increase of irritability to both these currents, with later diminished faradic and little or no increase in galvanic irritability.

In cases where the inflammatory process is severe enough to produce marked loss of motor power, the typical reaction of degeneration is quite uniformly found within ten days of the onset. Besides the tingling, numbness and pain, which are increased by pressure over the nerve trunks or by motion, there is great diminution of the perception of tactile, muscular, temperature, and painful sensations. The tactile and muscular senses are often completely lost, but the appreciation of temperature and painful sensations is rarely wholly abolished.

The most common trophic change is rapid atrophy affecting the muscles, often accompanied by coldness and œdema of the affected limb, together with either a shiny or rough appearance of the skin. Sometimes trophic changes occur in a joint resulting in deformity and fixation.

Anatomically, there are two kinds of neuritis, isolated or mono-neuritis, and multiple or poly-neuritis. Mono-neuritis is more frequently caused by traumatism than by all other causes. It may also be caused by the toxic effects of lead, arsenic, mercury and silver; and also by tuberculosis, leprosy and syphilis, and frequently by the rheumatic or gouty condition.

Under this head of isolated or mono-neuritis may be placed shingles, Bell's facial paralysis, Erb's brachial paralysis, lead palsy, all peripheral paralyses of traumatic origin, most cases of sciatica, and many cases diagnosed as muscular rheumatism or neuralgia. Shingles is an acute dermatitis due to a neuritis of the intercostal nerves, in which the symptoms are almost entirely of a sensory and trophic character. Bell's facial paralysis is a neuritis of the seventh cranial nerve, or that portion of it which lies in the Fallopian canal. As the seventh is a purely motor nerve, the symptoms are almost entirely motor. In those painful affections of the nerves which have been called neuralgia, when in addition to the pain, there is either a decided atrophy of the muscles supplied, loss of motor power, loss of reflexes, or when the reaction of degeneration exists—there is undoubtedly an inflammation of the nerve, instead of a purely functional condition.

The literature of multiple neuritis was very meagre prior to ten years ago. The clinical symptoms of a typical case were described by Jackson of Boston, as long ago as 1822, but it was not until the publication of Buzzard's Harveian Lectures in 1885[1], that an accurate clinical picture of the disease was established. In 1887 Starr added much to the knowledge of the pathology, etiology and symptomology of this disease. In 1890[3] Ross added still further to our knowledge of the disease.

1 Lancet, Nov. and Dec., 1885.
2 Med. Record, Feb., 1887.
1 So. Cal. Pract., Jan., 1895.
3 Med. Chron., Apr., 1890.
4 Diseases of the Nerv. Sys., 1892.

And Gowers in 1892[4] gave a very full and minute description of the pathology, etiology and differential diagnosis of all forms of the disease.

Multiple neuritis may be of two types, the subacute and the acute pernicious type, either of which may be caused by a peculiar blood state, the exact nature of which is not known; but may be developed by diabetes, gout, rheumatism, beriberi, diphtheria, infective fevers, malaria, tuberculosis, syphilis or leprosy; or may be caused by the poisons of alcohol, illuminating gas, lead, arsenic, mercury or phosphorus; and may also be caused by exposure to cold and damp and by violent exertion. And recently numerous cases have been reported which seem to be due to the changes of senility. In four cases which I have seen there was a history of alcoholic addiction, together with exposure to cold and wet. The motor, sensory and trophic symptoms are very similar to those described in mononeuritis, and as in it, there may be a marked preponderance of either motor or sensory or trophic symptoms. In a typical case both the upper and the lower extremities are involved; sometimes the disease extends to the thoracic and abdominal nerves, and still more rarely attacks the cranial nerves. When the vagus is attacked the disease is usually quickly fatal. The sensory and motor symptoms are most marked below the elbows and knees, and usually symmetrical in their distribution, beginning in the feet and rapidly extending to the hands. However extensive the involvement, the sphincters of bowel and bladder are rarely paralyzed. When there is incontinence it is likely to be due to the mental apathy rather than to the actual impairment of the sphincters. Not infrequently in the course of the disease dementia with transient delusions is developed, especially in cases of alcoholic origin.

Multiple neuritis may complicate anterior polio-myelitis, especially when of rheumatic origin; or rather the rheumatic or gouty condition may cause both diseases at the same time, as in the case of a child reported by Burnham[1], and in the case of a child which I saw about three years ago. The child was about fifteen months of age, and suffered from a well marked attack of acute rheumatic arthritis, which was followed in about two weeks by sudden paralysis of the lower limbs, with ankle-drop, and reaction of degeneration. A few days later the same symptoms appeared in the upper extremity, being most marked on the left. A week later before much atrophy had taken place, the child suffered intensely whenever the limbs were touched or moved, and all the limbs rapidly atrophied. Later the respiratory muscles became involved and the child died from respiratory failure. No autopsy was permitted. But from the sequence of symptoms, I feel sure that the anterior polio-myelitis succeeded and was caused by the rheumatism, and that later the same cause acted to produce a multiple neuritis.

According to Gowers the inflammatory process may ascend from the nerves and cause spinal meningitis, anterior polio-myelitis, or even diffuse myelitis. In diphtheritic paralysis the motor and trophic symptoms are most marked; the sensory disturbance usually being slight. It involves more frequently the cranial than the spinal nerves.

There may be considerable difficulty in differential diagnosis between multiple neuritis and anterior polio-myelitis in children who are too young to give an account of their sensations, or in cases of diphtheritic multiple neuritis, where the sensory disturbance, as is often the case, is slight. Both the diseases have the common symptoms of a febrile onset, early paralysis, loss of reflexes, rapid atrophy, reaction of degeneration, ankle-drop and wrist-drop. The onset, however, is more abrupt in anterior polio-myelitis; the paralysis develops more suddenly and at first involves the whole limb, rapidly improving in all but a few muscles; while

the paralysis of multiple neuritis is usually symmetrical, invading both feet and hands at the same time. Anterior polio-myelitis rarely involves all four extremities at the same time, though sometimes may successively involve all. The atrophy is much more rapid but less persistent, and the reaction of degeneration comes earlier in neuritis. In uncomplicated anterior polio-myelitis there is an absence of sensory symptoms, but in multiple neuritis pain is almost always a prominent symptom, together with a diminution of the temperature of the tactile and muscular senses. The following cases will illustrate various types of the disease.

Case I. E. M., age 34; married; a large, strong, well nourished man, was admitted to the L. A. Co. Hospital Sept. 24, 1890. He had been dissipated for two years, and for the past few months had drank very hard. About a week before admission slept on the ground when drunk; woke in the morning feeling very stiff, and noticed that day, that his feet were numb. This feeling, together with some tingling, increased and extended up his legs. When he came into the hospital he could walk, but complained of pain throughout the region supplied by both sciatic nerves. This pain was increased by pressure over the nerve and any movement of the legs; tactile sensibility of the feet was much blunted; knee jerks and plantar reflexes absent; no impairment of the sphincters; reaction of degeneration in both legs; complained of some numbness in hands; temperature 101½; pulse 110. He grew steadily and rapidly worse; legs became entirely helpless and very painful; hands and arms soon became as bad as his legs; two weeks after admission he could move neither hand nor foot, and respiration began to be difficult. He died of respiratory failure October 18th, about four weeks after he laid on the damp ground over night. During the last two weeks there was great mental failure with transient delusions. At the autopsy we removed the spinal cord and a portion of one of the sciatic nerves. Numerous sections of the cord in both cervical and lumbar enlargement appeared normal, but sections of the sciatic showed a diffuse neuritis.

Case II. John C., strong, well-developed boy of fourteen, with no history of previous severe illness. Was admitted to L. A. Co. Hospital December 9th, 1890. While coming to Los Angeles the previous March, he was nearly frozen to death by exposure to severe cold near Cheyenne. From that time until the present illness his hands and feet had not felt quite natural, and at times there had been considerable tingling in them. A few days before admission he had been out in the rain and had not properly dried and warmed himself afterwards, but went to bed in a cold damp room. The next day while working in a printing office, he noticed that objects appeared double, also that his legs felt weak, and that there was a great increase in the numbness and tingling in his feet and legs. He was obliged to give up work and a few days later was admitted to the hospital. He could then stand unaided on both feet, but on neither one alone. The effort of standing caused great pain, as did any motion of the legs, which were acutely sensitive to pressure over their nerve trunks. He had spasmodic contracture of the muscles, mostly in the calf, which caused great pain; both knee jerks and plantar reflexes absent; decided ankle drop; greatly diminished tactile and muscular sense; temperature and painful impressions more accurately perceived; had the same sensory condition in the hands as in the feet; left external rectus muscle weak; reaction of degeneration in both arms and legs; temperature 100.5, pulse 96. He grew steadily worse; temperature ranged 100 to 102½; within ten days arms and legs had become wholly paralyzed. A little later the thoracic muscles became involved, but the sphincters remained intact. Respiration was so difficult that for days it seemed as if he must die. Swallowing became very

difficult, and the slightest movement of any part of the body caused intense pain. The muscles of the arms and legs atrophied rapidly, so that when he began to improve, he was a mere skeleton. Convalescence was slow and he was not able to walk unaided for nearly six months. But now, nearly four years from the onset, he says he is in perfect health and is working steadily driving a delivery wagon for a coal yard.

CASE III. H. L. W., truckman, aged 49; temperate in habits; has had numerous attacks of sciatica previously. While engaged in doing heavy teaming, he noticed one morning that there was a peculiar tingling and numbness in his hands and feet, and that he had a feeling of great fatigue on attempting to do his ordinary work. These symptoms increased steadily, so that on the third day he was obliged to give up work. I saw him about one week later and found the following condition: Numbness, burning and tingling in both hands and feet, and pain so severe that he had been unable to sleep for the past two nights. The dynamometer shows a grip in the left hand of 43 points, in the right 54. In his ordinary health he should be able to carry it above 100 with either hand. He is able to walk about, but it produces a feeling of great fatigue and weakness. Stands with difficulty on one foot alone; the knee jerks are very slight, and it requires a strong faradic current to produce contractions in the leg or forearm muscles. Tactile temperature and muscular senses much impaired in both feet and hands; pain sense fairly active. Under full doses of salicylate of soda, a little phenacetin to relieve the pain, rest and warmth in bed, he has at the end of a month, nearly recovered. The two other cases were of the acute pernicious type, while the last case was an unusually mild one. Between these two extremes, cases showing widely varying degrees of severity will be found.

In sub-acute cases of multiple neuritis of the ataxic type, there is much resemblance to locomotor-ataxia in the loss of knee jerk and other reflexes, the ataxia, pain, anæsthesia, and the girdle sensation which is sometimes found, but the ataxia is developed earlier, and the pain is of a burning, boring character, increased by pressure, while in locomotor-ataxia it is darting and intermittent, not increased by pressure or motion. In multiple neuritis there is rapid atrophy and reaction of degeneration; in locomotor-ataxia, neither.

Prognosis: In cases of peri-neuritis, which is the usual pathological condition in isolated neuritis, the prognosis is good for restoration of usefulness of the paralyzed parts, and the earlier the return of faradic irritability the more favorable the prognosis for early and complete recovery. There is a great danger of recurrence, and there is usually more or less sensory disturbance, pain and paræsthesiæ remaining, which are aggravated by exposure to cold and over-exertion.

In multiple neuritis, if the patient is young and vigorous, and the cause is one that can be removed, as arsenic, lead, etc., or if the cause has already spent its force, *e. g.*, the effect of cold, over-exertion, diphtheria, etc., and if the paralysis is not complete and does not rapidly extend, and if the constitutional symptoms are not severe—the prognosis is favorable. If on the other hand the patient is past middle age, in feeble health, the onset rapid, constitutional disturbance great, paralysis complete and atrophy rapid—the prognosis is unfavorable, especially if there is early extension of the disease to the thorax or to the pneumogastric nerve. Alcoholic cases are unfavorable owing to the difficulty of keeping them from continuing the use of stimulants.

So far as I can learn, and from my own observation, there is no especial liability to recurrence in cases of parenchymatous neuritis.

In the treatment of multiple neuritis, the first thing is, if possible, to remove

the cause. And in the majority of cases alcohol is the cause, but the condition of the patient may be such that the abrupt withdrawal of the alcohol would be injudicious. The patient should be kept quiet and warm in bed. Heat applied to the limbs often gives relief to the pain, but great care should be taken not to produce blisters, as owing to the trophic disturbance, heat which produces no discomfort, may be sufficient to produce troublesome blisters. I have found a ten to fifteen per cent solution of menthol in liquid vaseline a soothing external application. After the limbs have been rubbed with this, they may be wrapped in cotton-batting. In the alcoholic cases, digitalis, the cinchona preparations and strychnia are indicated. In cases due to rheumatism or cold the salicylates should be given in full doses in the early stages of the disease. In cases of malarial origin, quinine and arsenic should prove efficient. In the toxæmic cases, iron in full doses should be given. Usually some opiate will be required to relieve the pain. If the heart is not enfeebled the various coal-tar preparations can be tried. If these are contra-indicated, the hypodermic injection of cocaine carried into the region of the nerve trunks may be tried. But many cases will require the use of morphine or codeine. To procure sleep at night I have found the combination of morphine and hyoscyamine one of the most efficient. Throughout the acute stage of the disease nutritious, easily digested food should be administered, and the vital powers of the patient sustained as far as possible. The treatment for the later stages of the disease, regardless of the cause, should consist in galvanism or faradism (using that current to which the muscles respond most readily), tonics, iron, the various cinchona preparations, strychnia and arsenic. In this connection it should be remembered that the latter sometimes is a cause of neuritis. Probably no drug is so efficient as strychnia, and it should be continued for a long time and in full doses. Massage and judicious exercise are most advantageous. Treatment should be persisted in, especially the use of electricity and massage, until recovery is complete, though this may not take place for many months.—(Transactions State Medical Society.)

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SELECTED.

DEPARTMENT OF MEDICINE.

UNDER THE CHARGE OF DRS. F. D. AND ROSE T. BULLARD.

THE LINGUAL TRACTION METHOD OF ARTIFICIAL RESPIRATION.—(*Therapeutic Gazette.*) Dr. Roussel has summarized the literature on the method which includes reports of successful treatment of cases of drowning after long submersion, poisoning with bromidia and cocaine, and asphyxia during chloroform anesthesia. The treatment was successful in the exhaustion following post-partum hemorrhage and in a case of extensive bleeding from hemorrhoids. Over fifty successful results in the asphyxia of the new-born have been reported by as many different observers in Europe. In the greater number of these instances other methods of artificial respiration had previously been employed.

The doctor reports two cases of asphyxia of the new-born, one especially severe, which resisted the ordinary methods of artificial respiration, but responded to the lingual traction. After the fifth or sixth traction emesis was provoked, followed by an occasional shallow respiration; after about ten minutes' work the child was out of danger. The other case was in similar condition, but lingual traction was resorted to at once, with satisfactory results.

He concludes; "It would seem to me that the success of this treatment, as established by these already numerous reports from different and competent observers, would justify its greater recognition and adoption on this side of the water."

ACONITINE IN NEURALGIA.—(*Therapeutic Gazette.*) Dr. Hunsberger thinks aconitine is a remedy that demands more attention than is usually accorded it. He has recorded fifty-seven cases of neuralgia of the various organs treated with aconitine principally; cases varying from twelve to fifty-seven years of age. In no case did the drug produce any bad symptoms; in a few cases there was some complaint of feeling temporarily weak; in others, some numbness of fingers and tingling of lips. The appetite was never diminished; in fact, usually increased with cessation of suffering. No constipation, no nausea, no dryness of throat nor dull headache, which accompany the admistration of morphine, atropine, Brown-Sequard pill, etc. He uses 1-200 grain, repeated every hour in some cases, until three, four or six doses have been given; in others, 1-200 grain is given every two hours; in neuralgia of the sciatic nerve it should be given in small doses for two consecutive months, and again for the same period after a cessation of two weeks, repeating as long as there is a tendency to recurrence.

He does not claim that aconitine is all that is needed in neuralgia, but that as an analgesic in this affection it has no superior. This is explained by its physiological action, all authorities agreeing that it diminishes reflex activity by a paralysis of both motor and sensory nerves, commencing at their peripheral endings and being most marked in the *sensory* nerve endings.

ON THE ADMINISTRATION OF THE SALICYLATES IN ACUTE RHEUMATISM. Extracts from a paper read before the Cambridge Medical Society by P. W. Latham, M. A., M. D., Fellow and Senior Censor of the Royal College of Physicians, Senior Physician to Addenbrookes Hospital, Cambridge, England.

"We have now become so familliar with the successful treatment of acute rheumatism by means of salicylic acid and salicylates, that it may seem somewhat superfluous for me to address you on the subject. But cases have come under my observation in which objections have been taken to the use of these remedies, on the ground either that they disagreed with the patient, producing nausea, vomiting, etc., or that notwithstanding fairly large doses of the drug, the pains have not been relieved, the temperature has not been reduced, or, most serious of all, cardiac or other complications have arisen during the time the patient was taking the remedy, and when, apparently, he was under its influence. Now it is in preventing the development of these complications that, when properly administered, the remedy so strikingly shows its power, truly acting as a distinct specific.

"In my Croonian Lectures in 1886, I spoke, apropos of rheumatism as follows: 'Here is a disorder which, under different treatment, may exist for weeks, stationary, so to speak, in its intensity, the great heat and nervous and vascular excitement and pain and swelling exactly of the same amount today as they were weeks ago, a disorder which, less than fifty years ago, was said to be often such in itself, and such in its appalling incidents, as to need, from time to time, that medicine should put forth the full compass of all its powers. Every organ, or system of organs, which either directly or indirectly can receive the impression of remedies, are from time to time called to bear all that they can possibly endure; and it is often only when the powers of medicine are pressed even to the verge of destroying life that life is saved.

"And now, with or without the administration of a purgative, as the occasion requires, the patient is placed fully under the influence of salicylic acid, and in

from forty to sixty hours, not unfrequently in a shorter time, the pain in the joints have subsided, the limbs can be freely moved, and the bodily temperature has reached the normal condition. But more than this—and here the remedy shows its signal power—in no case of rheumatism that has come under my care during the last six years, either in hospital or private practice, has there been developed, where the heart was previously sound, any cardiac complication, such as endocarditis or pericarditis. If this can be maintained and ensured, we have, indeed, in our hands, a most potent remedy. Cardiac complications constitute the chief danger of acute rheumatism, and the danger, if the disease is taken in hand soon enough, may, with our new remedy, be averted.

"Eight years further experience has only confirmed what has been stated. I have seen numbers of cases where complication have been developed before the patients came under my care, but feel strongly that these complications might be prevented, or at least materially lessened, by earlier and more energetic treatment, and it is for this reason chiefly that I venture to address you today. Now what are the conditions to insure success? Principally that the true salicylic acid obtained from the vegetable kingdom must alone be employed. If you have to give large doses, avoid giving the artificial product obtained from carbolic acid, however much it may have been dialysed and purified. An impure acid will very quickly produce symptoms closely resembling delirium tremens."

"The causes of failure with this remedy, as far as I have been able to judge, are: 1st. Insufficient doses at the commencement. 2d. The non-administration of a purgative. 3d. Feeding with substances other than milk, such as beef-tea, broths, etc., especially in the earlier stages."

"As this plan of treatment works prosperously day after day in its immediate effects, so day after day it gives an earnest of the remedial impression it is exercising upon the whole disease. It abates the fever, it softens the pulse, it reduces the swelling, and it lessens the pain. In short, it subdues the vascular system like a bleeding, and pacifies the nervous system like an opiate; and often in the course of a week, the acute rheumatism is gone. In three days, there is often a signal mitigation of all the symptoms; and in a week I have often seen patients, who have been carried helpless into the hospital and shrieking at the least jar or touch, or movement of their limbs, risen from their beds, and walking about the ward quite free from pain."

"Now, if in the treatment of acute rheumatism, you were to choose one indication and abide by it, and were to trust one class of remedies and to it only, you would find more cases that admit of a readier cure by the method now described than by any other. I would still recommend that the natural salicylic acid, or its salt, should be employed, in preference to the artificial acid, when large doses are administered. I admit that what are termed the 'physiologically pure' preparations may be as good, but I prefer using the natural products, owing to the complete safety which, with ordinary care, attends their administration. In a paper in the British Medical Journal of December 10th, 1881, I first called attention to the danger of using the artificial acid, the impurities then existing in it amounted to as much as 15 per cent. By improved methods of preparing it, in 1884, these impurities were reduced to 5 per cent., and now it is so carefully prepared, that the product is said to be 'physiologically pure.' In the Pharmaceutical Journal of November 22d, 1890, you will find a very exhaustive paper by Professor Dunstan, giving an account of these impurities, with a report, also, by Professor Charteris, of the poisonous effects which two of these impurities, viz., ortho-cresotic acid and para-cresotic acid, have on the animal system. The same journal also contain a report of an interesting discussion on the subject which took place at the Pharmaceutical Society."

DEPARTMENT OF SURGERY.

UNDER THE CHARGE OF JOS. KURTZ, M. D., PROFESSOR OF CLINICAL SURGERY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA, AND CARL KURTZ, M. D.

THE VALUE OF BROMINE IN MILITARY SURGERY.—(International Journal of Surgery. By M. O. Terry, M. D., Brig.-General and Surgeon-General, N. G., N. Y.) The valuable remedy to which I shall direct your attention is not one of recent discovery, since as far back as 1826 M. Balard, of Montpelier, in the bittern of sea-salt works found it associated as bromide of magnesium. For its preparation I will refer you to the dispensatory. We find it recommended for a number of chronic diseases, but will confine our observations to conditions which have to do with camp and field.

As a germicide bromine, 1 to 875, will prevent the reproduction of spores in boiled meat infusion; 1 to 5397 will prevent development of spores; 1 to 336 will prevent the reproduction of developed bacteria; 1 to 2550 will kill bacteria; 1 to 769 will prevent the reproduction of undeveloped bacteria. (Brunton, Pharmacology.)

Bromine was used during the war and was written up especially by Medical Director M. Goldsmith, U. S. V. In the Medical and Surgical History of the War of the Rebellion, part 3d, Surgical volume, can be found the article which deals principally with the effects of Bromine in gangrene. (See page 834.) In preparing bromine for use the following directions were given and the solution was made as follows: "Bromine, one troy ounce; bromide of potassium, 160 grains; distilled water, enough to make four fluid ounces of the entire mixture." At the same time printed directions for its use were issued as follows:

"1. *For Fumigation:* Place vessels containing one ounce of the solution at different points of the ward and in number sufficient to secure in the latter the constant presence of the odor of bromine. It should be borne in mind that if the vapor of bromine comes in contact with the vapor of water hydro-bromic acid is formed; therefore, when there is much of the vapor of water disengaged in the apartment the quantity of the vapor of bromine must be correspondingly increased.

"2. *Topical Applications of the Vapor:* A piece of the dry lint is to be placed over the diseased part; over this is to be placed another piece of lint *moistened with the solution of bromine;* over this a third piece *spread with simple cerate;* the whole to be covered with oiled silk and bandaged, so arranged as to retain the vapor in contact with the diseased surface as long as possible. The solution is to be renewed as often as it becomes exhausted by evaporation.

"3. *The Solution, in Substance, as a Direct Application in Hospital Gangrene, Diphtheria, Gangrene of the Tongue and other Diseases of this Nature:* The parts are first to be dried by the application of charpie; then the sloughs, if thick, should be trimmed out with forceps and scissors as much as possible, for the thinner the slough the more effective is the remedy. The parts having again been dried, the solution is applied by means of a mop or pointed stick of wood, in quantity sufficient to saturate the sloughs. If the sloughs undermine the skin or dip down into the intermuscular spaces, the solution must be made to follow, with the pointed stick or by means of a glass syringe with a long nozzle. If the application has been effectual all odor from the diseased surface ceases and the slough becomes somewhat hardened. The remedy should be re-applied every second hour as long as any odor of putrefaction is present, or as long as the sloughs appear to be diffluent. It is not always necessary, especially when the

sloughs are diffluent and thin, to use the solution in its full strength; it may be weakened by the addition of water as the disease subsides.

"The points to be especially attended to in the use of the solution of bromine are two: 1. The solution should be applied in strength and frequency sufficient for the inpregnation of the *whole of the sloughs*. 2. To secure this end the application *should be made by the surgeon himself* and never be trusted to a nurse. If the sloughs are thick and cannot well be trimmed, the bromine may be introduced into the thickness of the slough by means of a hypodermic syringe. After the topical application of the solution, the part, when so situated as to render it practical, should be subjected to the influence of the vapor. (See No. 1.) Surgeons will do well to bear in mind that bromine is a new remedy for the purposes indicated above. The directions for its use given here are those followed in the military hospitals of this city; it may be found advisable to modify them as experience with the remedy accumulates. It is, therefore, earnestly recommended that the subject be studied diligently; that the effects of the remedy be carefully weighed, and that the application be varied as new facts are developed in its use."

Surgeon Thompson has stated in his report in reference to the action of bromine, expressly in hospital gangrene: "The action of bromine is that of a caustic; all of the necrosed tissues are converted into tough yellow shreds and are perfectly deodorized. The ulceration seems to be checked at once, while the nervous system, no longer depressed by the absorption of the fetid products of the mortification, soon recovers from its depression. The areola loses its livid hue, becomes more crimson and finally disappears; the sloughs are rapidly thrown off and a rosy, florid surface appears beneath. The bromine was also used in the form of vapor, confined to the surface by oiled silk. Its antiseptic influence is very powerful, since not the least odor could be perceived on dressing these gangrenous sores, even when they have been covered closely with oiled silk for twelve hours. From its antidotal efficacy in these two cases I have formed a high opinion of its value in the local treatment of this disease."

Surgeon Cleveland states, among other things: "Nearly every day I have had either cuts, pricks, scratches or other abrasions on my hands, which are freely exposed in dressing the wounds and in the dead house, with no unpleasant consequences. I have always applied bromine to the denuded surfaces before exposure, and am convinced that the virus of the dead house, as well as other animal poisons, is entirely destroyed by the action of the bromine."

The above has been quoted to show the method of using bromine during the late war, how imperfectly it was understood and the limitation of its use. I confess I have not had extensive experience in the use of bromine in gangrene, but statistics show that scarcely 2.6 per cent. of cases has been lost by its use as against 38.4 and 51.5 per cent. by other methods.

The object in bringing this method before you more particularly has been for the purpose of directing your attention to its indications in a variety of *septic conditions heretofore not entirely satisfactorily treated*. I have been making observations in the use of this remedy for many years, and have been so astonished at its results that I am surprised that it had not been more generally adopted for a variety of conditions of this character. Surely, difficulties, such as dissecting wounds or cuts of all kinds by poisonous instruments, injuries made by a rusty nail, suppurative wounds, especially of joints with sinuses, and phlegmonous inflammations are questions of sufficient moment to attract the attention of the surgeon, and have a marked bearing on the surgery connected with the militia.

In the preparation of bromine for use I have formulated the following prescription from which I have made weaker solutions:

Bromine.....drachms 2
Pot. Bromide or Iodide.....drachms 2
Aqua.....pint 1 Marked 1-64.

For all poisonous wounds, as those caused by rusty nails, bite of a dog, et cetera, the first dressing should be made from the solution marked 1 to 64; subsequent dressings 1 to 240. As the inflammation subsides the heat and pain disappear from these wounds, in which case the strength of the application of the bromine should be decreased to 480, and even weaker. In the case of an injury of the knee resulting in suppuration, sinous openings having formed, I should wash out the openings with 1 to 240, using the same application externally. Such difficulties, which continue all the way from three weeks to many months, I have seen recover within one week after having persisted under other methods of treatment for weeks. In the case of phlegmonous erysipelas, now comparatively rare since the introduction of antiseptic methods, following amputations, the application of bromine, 1 to 240, keeping the parts constantly wet, will rapidly reduce the septic inflammation without any other measures.

In the case of a surgeon who had inoculated himself in the index finger of the right hand and middle finger of the left, after cauterizing with the crystal solution of carbolic acid and nitrate of silver without improvement, suppuration still continuing, the pain and swelling increasing, an application of bromine to the finger, it being inserted into a glass containing a weak solution of the bromine, gave immediate relief and suppuration rapidly disappeared.

Tetanus, which may proceed from a rusty nail, bruises and various injuries, the danger of which is caused by the irritation of nerves coming in contact with the injury, may be prevented by the early application of bromine in an emulsion with oil to reduce the septic inflammation. The oil being a relaxant, prevents contraction and, therefore, reflex irritation resulting in tetanus.

In rhus toxicodendron, or ivy poison, it has given relief when bicarbonate of soda and carbolic acid and other vaunted remedies have failed.

Should diphtheria break out among the troops the value of this remedy is incalculable. Dr. Teste, of Paris, France, has spoken with positiveness in regard to its value in this difficulty, and asserts that "nothing is more simple in the treatment of diphtheria and croup than the use of bromine water, i. e., distilled water containing 1 to 100 of its weight of pure bromine, of which ne administers from one to three drops in a teaspoonful of sweetened water every hour, reducing the frequency of the doses as amelioration sets in." He says he "can count by the hundreds the cures obtained by a means so simple."

The great volatility of bromine makes it particularly useful as a deodorant and an atmospheric disinfectant. In wards, therefore, where many surgical cases are placed together, the evaporation of this remedy, I believe, will insure safety and prevent contamination of other patients. The influence of this remedy in that respect was noted during the late war.

In preparing for operations, a weak solution of bromine to which is added carbonate or bicarbonate of soda for its saponifying effects, is more frequently used by me than any other antiseptic. Unlike bichloride of mercury no danger from absorption need be apprehended.

Its internal administration is not to be lost sight of in septic conditions. Taking the preparation 1 to 64, one to three drops, largely diluted in water, may be given every three or six hours.

Seekers after truth can take the thread and carry it onward, developing the uses

of this invaluable remedy in other channels. As will be observed, the underlying principle in reference to the solution of bromine is whether the difficulty is septic or not. A comprehension of this feature of the remedy will make it invaluable to the surgeon for a multitude of difficulties not within the scope of this paper.

A NOTE ON THE ADVANCE IN THE SURGICAL CURE OF HERNIA. By W. B. DeGarmo, M. D., (International Journal of Surgery). In order to bring into marked contrast the operations now being extensively done for the cure of Hernia, with those of the past which have failed, we must devote a few moments to the review of the latter.

In 1876 Czerny gave to the profession the operation bearing his name, which with various modifications, and under the names of the authors, held the field for ten years. The neck of the sac at the external ring was tied off, but its removal was seldom attempted. The pillars of the external ring were then brought together as tightly as could be done without constricting the cord. The suture material was usually catgut.

In 1886 the Macewen's operation spread rapidly over the surgical world. He dissected out the hernial sac, folding it upon itself into a bunch or "boss," which after being pushed up through the canal was stitched to the abdominal wall at the internal ring, where it was expected to act as a barrier to the re-descent of the hernia.

Then came the method bearing the name of our eminent countryman McBurney, which rapidly took the lead of all others in this country. This operation while it did not prove a success as regards permanence of cure, was a long step in advance, in that it opened the canal to the internal ring and removed all foreign substances. The error in its technique was in closing the wound by cicatricial tissue which did not prove stable in character.

Next in line, and in importance, came the almost simultaneous publications of Halsted and Bassini, in 1890, of methods in many respects similar; but with the evidence in favor of Bassini, in that he had been using his operation since 1884 and was able with his first publication to give a report of over two hundred cases. Not only was this a larger number of cases than the author of any previous operation had ever reported, but the results as presented were such as had never been secured by any other method, and his death rate so light as to remove it from the list of dangerous operations.

This operation has now been under trial in this country for the past four years with results fully equaling those presented by its author, and needs little description at this late date. Its details are within the reach of all and quite familiar to most of my hearers. The canal is in every instance opened to the internal ring. The sac is separated from the cord, ligated, and cut off flush with the peritoneal surface. The cord is elevated and the original canal for its transmission obliterated. The divided structures are brought into apposition and held by a suture material which is not quickly absorbed, and which does not act as an irritant to adjacent tissues. While Bassini uses silk for this purpose, most operators in this country are using kangaroo tendon, and are quite willing to confess their obligations to our former president, Dr. Marcy, for this valuable material.

Without further detail let us consider *why* this operation (and Halsted's as well) is liable to cure where former methods have failed. The secret, if there be any, is soon discovered by those who adopt it, and it is this, that the canal is cleared of all foreign substances, and that repairs begins at the internal ring and the structures are restored to as nearly a normal condition as is possible.

In my own operations I have found in the canal in various cases, since doing

the Bassini operation, the following substances which, if they had not been removed, would have furnished strong predisposing causes for the recurrence of the hernia: 1st. Tough and thickened sacs, a persistent tube with serous lining. 2nd. Good sized bunches of soft fatty tissue connected with the cord. 3rd. Lipomatous growths, extra-peritoneal. 4th. Enlarged veins connected with the cord. 5th. Masses of adherent omentum inside of sac and in vicinity of internal ring.

In former methods none of these complications were found, but as I have had opportunity to demonstrate upon some of my own patients they have been the cause of recurrence. The opening of the canal throughout its entire length has, therefore, been, it is believed, the most important advance in the surgical cure of these cases. Twenty years ago to remove a portion of the omentum was deemed a hazardous undertaking, and for this reason large and hypertrophied masses were returned to the abdominal cavity. They here not infrequently acted as a foreign body producing peritonitis. If the patient was fortunate and escaped this accident, the hardened plug of fat remained at or near the internal ring ready to act as a wedge for redilating the canal. Later several eminent operators were unfortunate enough to have sepsis or secondary hemorrhage following its removal.

At present this is all changed, the speaker has now operated upon forty-five cases, in patients of all ages from thirteen to seventy years, where pieces of omentum of various sizes have been removed and without an accident of any kind. These have been enormous masses requiring the ligation of numerous large vessels in some instances. Formerly operators were in the habit of surrounding large masses of this tissue by a single ligature, and that usually of catgut, cutting it off and dropping the stump back into the abdomen. Under pressure the fatty tissue was rapidly absorbed, the ligature slipped off and hemorrhage occurred. I regret to say that this method is still followed by some surgeons to the very great risk of their patients. In a recent report of these cases before the surgical section of the New York Academy of Medicine, (*Annals of Surgery*, June, 1895,) I have demonstrated a method which seems to insure the greatest amount of safety. This is to use silk as the ligature, to tie every vessel that is large enough to be seen, without including any fat. I have applied over twenty silk ligatures to a single omentum. I have used silk in all of my cases, and have seen no bad effects from leaving it in the cavity of the abdomen. The method of tying off omentum which is suggested has also another advantage. When the omentum returns to the abdomen its edge is free to spread out naturally instead of being held in a mass in the vicinity of the canal.

EYE, EAR, NOSE AND THROAT.

UNDER THE DIRECTION OF W. D. BABCOCK, A.M., M.D., PROFESSOR OF DISEASES OF THE NOSE AND THROAT, COLLEGE OF MEDICINE OF THE UNIVERSITY OF SOUTHERN CALIFORNIA.

TREATMENT OF DIPHTHERIA BY ANTITOXIN. (*Editorial Brit. Med. Jour. Aug. 24, '95.*) "Dr. Martin gave the result of his own investigations, showing that extensive nerve and heart muscle degeneration—the pathological characteristic of diphtheria—was produced by injection of pure diphtheria toxin, from which it is evident that the Klebs-Loeffler bacillus is the cause of diphtheria. His experiments on the effect of the diphtheria antitoxin showed that when administered in sufficiently strong doses it counteracted all the effects of the toxin or the diphtheritic ferment. It has only a slight effect on the febrile

temperature produced by the albumose, but it completely counteracts the fatty degeneration of the heart, and to a very great extent also the nerve degeneration, which was insignificant in extent. It was found, also, that the injection of large doses of the anti-toxic serum into the venous circulation of the rabbit produced but little effect on the body temperature and no loss of weight, appearing to be, as far as could be judged, a perfectly innocuous substance.

It is evident from these experiments, carried out under such exactly observed and controlled conditions, that the actions of the antitoxic serum may be followed with the greatest nicety. The actions are, first, that antitoxic serum, even when injected in considerable quantities, produces no appreciable injurious effect even on very susceptible animals. Secondly, that this serum, when given in sufficient doses, appears to neutralise completely the action of the active ferment which plays so important a part in the production of symptoms of diphtheria; whilst thirdly, it also neutralises in a very marked degree the effect of those albumoses which are formed in the later stages of the disease, apparently through the action of the ferment on the albuminoid substances with which it comes in contact, and which appeared to be stored up in the body for some considerable time after the ferments have ceased to act. Most of the speakers who followed were in full accord with Dr. Martin on most points, and brought forward strong clinical evidence in support of the position they assumed.

SUB-CONJUNCTIVAL HEMORRHAGE LIMITED TO THE OUTER PART OF THE EYE A SIGN OF FRACTURE OF THE ORBITAL PLATE OF FRONTAL BONE.—(*London Lancet*, January, 1895.) Morrison claims that a fan-like sub-conjunctival hemorrhage on the outer portion of the eye is an absolutely diagnostic symptom of transverse fracture of the corresponding orbital plates of the frontal bone. He suggests as a reason for this particular disposition of the blood, the lessened resistance of the loose cellular tissue in this locality, the form being determined by the pressure of the lids. In three cases detailed, the diagnoses were verified by the autopsies.

NASAL POLYPI, ETIOLOGY.—(Bosworth, B. M. J., August, 1895.) My own belief is that the source of polypi is in one of the accessory cavities. In the large majority the ethmoid cells are at fault; in a small proportion the antrum, and perhaps the frontal sinus, are the source of growth. The starting point is in an inflammatory process; when this occurs in one of the closed cavities the process takes on something of a myxomatous character. The membrane becomes thick and of a soft, gelatinous consistence; this is passed out, as it were, from the cells, as the result of intercellular pressure, and makes its appearance in the nasal cavity in the form of a polypus. This degeneration also makes its appearance by extending to the membrane covering the middle turbinated bone, which now becomes a new seat for the attachment of growth. In this way I think we find in the ethmoid cells the favorite locality for the seat of polypi, by an inflammatory process, but not by suppuration.

OBSTETRICS AND GYNECOLOGY.

UNDER THE CHARGE OF WALTER LINDLEY, M.D., PROFESSOR OF GYNECOLOGY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA.

TREATMENT OF EARLY ABORTION.—(*Western Lancet.*) A conservative treatment of early abortion is recommended by Schauta, of Vienna, in a recent article. The old rule that pain and hemorrhage combined mean inevitable abortion he does not indorse, and thinks the accident preventable as long as the

hemorrhage is not excessive or the cervix dilated. He does not try to check the bleeding and trusts to rest, which is continued for eight days after the last bleeding. In those cases where the os dilates and abortion becomes inevitable, he tampons with a strip of iodoform gauze about two yards long and the width of three or four fingers' breadth. He prefers to retract the perineum with the fingers of the other hand instead of using the speculum, and renews the tampon at the end of twenty-four hours at the least, removing it sooner if the appearance of sacral pains indicate that the ovum has been expelled from the womb. This method of treatment is in sharp contrast to the radical advice so often given of late to go in at once and curette out the womb as soon as an abortion becomes inevitable—a practice which Schauta objects to because of the danger of leaving fragments of membrane behind.

(Where there is threatened abortion we believe rest, as recommended above, and ten-drop doses of fluid extract of ergot until all signs of hemorrhage have ceased is the best treatment. Where the abortion is inevitable the treatment indicated in the above extract we believe to be dangerous.—L.)

VAGINAL HYSTERECTOMY.—(*International Journal of Surgery.*) At the recent Baltimore meeting of the American Gynecological Society, Dr. Chas. Jacobs, of Brussels, Belgium, read a paper on "Total Extirpation of the Uterus by the Vaginal Route." He presented a table of four hundred and three cases in which he had operated, with twelve deaths. The indications for the operation were cancer, fibroid tumor, extra-uterine pregnancy, suppurative disease of the appendages, prolapse of the uterus and vagina, and disease of the uterus following abdominal operations. Of the accidents following the operation were nine cases of fistula, five intestinal, three vesical and one ureteral. It was all important to have suitable instruments in performing the operation, especially instruments for hemostasis. In twenty-one cases it had been impossible to remove all the diseased tissue, but no bad results followed such incomplete operations.

Dr. W. H. Wathen, of Louisville, Ky., read a paper on "Vaginal Hysterectomy for Uterine Myomata and Diseases of the Adnexa." It was always possible to complete this operation by abdominal section if necessary. The technical difficulties were not greater than in the severer cases of abdominal operation and the drainage was much better. Success depended on the use of suitable instruments, on not wounding the viscera, and in preventing hemorrhage. The advantages of the operation were rapid convalescence, freedom from suppuration and hernia, and low mortality rate.

ALCOHOL IN SICK CHILDREN—Seibert, (*Archives of Pediatrics*, XII, 5, *Buffalo Medical Journal*) condemns its use in gastro-intestinal disorders, and even in typhoid, except in emergencies. Alcohol-fed pneumonic children convalesce more slowly than others treated without it, therefore he does not give it here except in threatened or actual collapse. In scarlatina he limits its use to an occasional dose of light wine or whisky in septic conditions induced by absorption from pharyngeal necrotic tissue. In malignant cases he has never seen the slightest good from its use. In diphtheria he uses it in large doses in heart weakness, though doubting its value. He believes that the amount given to sick children is, as a rule, in direct proportion to the physician's ignorance of the proper dietetic and hygienic management of the case.

(The place for wines, beer, brandy and whisky in the therapeutics of children and adults is growing more and more circumscribed.—L.)

CORRESPONDENCE.

LICENTIATES OF THE CALIFORNIA STATE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners of the Medical Society of the State of California, held Sept. 3, 1895, the following certificates were granted:

BLUMER, GEORGE, 4115, Sierra Madre, Cooper Med. Coll., Cal., Dec. 4, 1891.
BROWNE, AUGUSTUS FRANK, 4116, San Francisco, Med. Dept. Univ. California, July 13, 1895.
CHAMPION, JOSEPH AUSTIN, 4117, Anaheim, Med Coll. of Ohio, Mar. 7, 1888.
DICKENSON, CLARENCE F., 4118, San Francisco, Med. Dept. Univ. Cal., Nov. 20, 1884.
EMERSON, H. B., 4119, San Francisco, Med. Dept. Univ. Cal., July 13, 1895.
FITZGERALD, WILLIAM WESLEY, 4120, Stockton, Jefferson Med. Coll. Pa., May 15, 1895.
GOLDSTEIN, JACOB, 4121, New York, Bellevue Hosp. Med. Coll. N. Y., Mar. 25, 1895.
GRAY, ROBERT F., 4122, San Francisco, Med. Dept. Univ. Cal., July 14, 1895.
HEITZIG, FRANK, 4123, So. Riverside, St. Louis Med. Coll. Mo, Mar. 8, 1882.
HOPKINS, EDWARD K., 4124, San Francisco, Med. Dept. Univ. Cal., Jnly 13, 1895.
POTTENGER, F. M., 4125, Monrovia Cincinnatti Coll. Med. and Surg. O., April 3, 1894.
RINNE, FREDERICK A., 4126, San Francisco, Med. Dept. Univ. Cal., July 13, 1895.
SMITH, DANIEL, 4127, Turlock, Missouri Med. Coll. Mo., Mar. 3, 1887.
TODD, A. M., 4128, San Francisco, Med. Dept. State Univ. Iowa, Feb. 10, 1864.
VILLAIN ALBERT John, 4129, San Francisco, Med. Dept. Univ. Cal., July 13, 1895.

REFUSED.

K. C. SAPERS, San Francisco.

CHAS. C. WADSWORTH, Secretary,
518 Sutter Street, San Francisco, Cal.

SENSIBLE TEMPERATURES, OR THE EFFECT OF HEAT ON THE BODY IN CALIFORNIA.

Much has been said and written of the climate of California, of its sunshine, its rainfall, its temperature and all phases of the weather, but seldom is anything said of the effect of the heat in California. It is well known that on account of its long sea coast, its mountain ranges and its latitude, that within the confines of the state may be found any climate that may be desired. The snow-capped and higher mountain regions have temperatures equal to the Arctic region, the plains and valleys, especially of the southern portion, have temperatures at times of the Torrid zone. The greater portion of the state has a pleasant mean between the two, while the immediate coast has a climate free from heat and free from cold.

Over the great valleys of the Sacramento and San Joaquin, and over that large area of the state removed from the immediate coast, and south of the Tehachapi mountains, maximum temperatures of from 106° to 118° is experienced during the summer months and as high as 122° has been recorded in Death Valley in July. These abnormally high temperatures are sufficient to kill a human being and would kill if it were not for the safeguards with which nature has provided all forms of life. The temperatures are from weather bureau records and show the temperature of the air, the thermometer being in the shade in a standard thermometer shelter. The reason that these temperatures do not kill is that while the degree of heat noted is that which is actually recorded, due to causes which will be explained, that which is known as the sensible temperature is about 40° less, dependent upon the amount of moisture in the air, and it is this sensible temperature which affects life.

By sensible temperature is meant that which is felt at the surface of the skin, where the skin is exposed as on the face or hands. The body when in a healthy state is constantly furnishing moisture to the skin which in cases exudes and stands in drops or as they are called "beads of perspiration." This moisture is

evaporated by the air, and hence the cooling of the skin. The cooling effects of the evaporation is the safeguard against injurious effects by extreme heat. This cooling of the skin subjects the body to the direct effect of the sensible temperature. This temperature is obtained from what is known as the wet bulb thermometer, i. e.,a thermometer having its bulb incased in a piece of muslin to which is attached a piece of wicking, which latter, ending in a cup of water, by the capillarity of the cotton wicking the bulb is kept moistened, hence its name, wet bulb thermometer. Dependent upon the dryness of the air does the evaporation from the wet bulb ensue, and the temperature shown by the wet bulb thermometer is the sensible temperature. For example, at San Francisco on June 29th, 1891, a temperature of 100° was recorded; at the same time the wet bulb thermometer showed a temperature of but 62°, while the air surrounding the body had a temperature of 100°, yet the air being dry, and the evaporation from the body being great, the body or the blood of the body was subjected to a temperature of but 62°. This of course to a person in normal health and in the shade. When water is changed from the liquid to the vapor condition a certain quantity of heat is utilized, which, on evaporation, is changed to latent heat and is thus no longer sensible. A feeling of coolness therefore results from the change and as long as evaporation continues the surface where it takes place is cooler than the general temperature of the surrounding air. When one is heated a fan is used to give relief and make comfortable. The motion of the fan causes a more rapid movement of the air; this air moved by the fan against the face has the same temperature as that which is not so disturbed. The cooling effect comes from the more rapid movement of the air produced by the motions of the fan which causes more rapid evaporation of the moisture on the face and exposed portions of the body, hence a more rapid cooling effect and the temperature of the air felt by the face under the influence of the fanning is the sensible temperature.

The months from June to September are the warmest months of the year, and the records of the past five years have been used to deduce the following. Along the coast line from San Francisco north the average maximum temperature during the summer is 65°, and the sensible temperature is 55°. South of San Francisco along the coast line the average maximum temperature is 70°, and the sensible temperature is 57°. In the Sacramento Valley the average maximum temperature is 37°, the average sensible temperature is 65°. In the San Joaquin Valley the average maximum temperature is 94°, the average sensible temperature is 63°. South of the Tehachepi Mountains and over Southwestern Arizona the average maximum temperature is 102°, and the average sensible temperature is 70°. So it is seen during the summer months while the average maximum temperature is high, except along the coast, the average sensible temperature is below 60° along the coast, and from 60° to 70° in the interior. The average maximum and average minimum sensible temperature over California during the summer are from 52° to 72° along the coast, and from 52° to 65° in the interior.

The highest temperatures on record at San Francisco during the months from June to September, inclusive, average 95°, while the sensible temperature on the same days average 63°. At Red Bluff the average highest is 111°, and the average sensible 71° At Fresno the average highest is 110°, average sensible 68°, and at Yuma the average highest is 116°, and the average sensible temperature at the time of highest air temperature is 73°. These comparisons show that the sensible temperature is on an average from 25° to 40° lower than the average maximum temperature, and that on the extremely warm days the sensible temperature is from 32° to 42° lower than the extreme air temperature. This shows that

while high temperatures prevail at periods of the year, the temperature which the body is required to endure is about 35° less than the air temperature recorded, and this difference is due to the amount of moisture in the air. If the air were as moist as is found in the region of the Great Lakes and along the Atlantic seaboard, and the temperature as high as it now is at times, the effect of the heat would be to kill by what is called sunstroke, the greater number of our population, to destroy vegetation and to desolate the country that now produces as much and as great a variety as does the most favored section of the globe.

Sunstrokes are produced by heat and a moist atmosphere; these prevent evaporation and a cooling of the body. The normal temperature of the body in a clean, healthy person is 93-4°. If it is above 99.5° or below 97.3°, some form of disease is indicated. An increase of 1° temperature above 98.4° corresponds with an increase of ten beats of the pulse in a minute. If a patient is shown to have a temperature of 106° the prognosis is unfavorable, and 110° is almost certain to produce a fatal issue. Hence can be seen that evaporation is absolutely necessary to cool the body during high temperature, else the blood becomes heated and death ensues. The conditions favorable to sunstroke are anxiety, worry or overwork, irregularities in food, and, in a marked degree, intemperance. One using beer, whiskey or other blood heating drinks is much more predisposed to sunstroke than one using cooling drinks or pure water. Personal uncleanliness, which, among other things, prevents the healthy action of the skin, tight garments, which impede the functions alike of the heart and lungs, and living in overcrowded and unsanitary dwellings, have an equal hurtful tendency. To overcome the unpleasant and debilitating effects of heat as much as possible, a clean, healthy skin is necessary, avoid alcoholic drinks, good, pure food and pure air. To obtain the beneficial effects of the reduction of temperature by evaporation, the shade must be sought and the direct sun's rays avoided. Beneficial effects may be incurred by a natural or artificial breeze or wind, and for parts of the body covered by clothing they may be obtained by adapting the clothing to the free passage of air and moisture. For hot weather and in the shade the color of the clothing is of less consequence than its texture, together with sufficient looseness to permit of the free access of air.

Weather Bureau Office, San Francisco, Cal., July 27, 1895.

B. S. PAGUE, Local Forecast Official.

A special meeting of the State Board of Health was called to discuss cholera, which is now prevalent in Hawaii. They have asked the general government to declare a quarantine against all infected ports, and enforce the quarantine laws, rules and regulations of the United States against them. This request did not contemplate an infringement on the duties of local health or quarantine officials, but was made because the authority of the government is extended far beyond the jurisdiction of municipal quarantine, which cannot decree nor enforce rules in foreign ports nor on board a vessel on its voyage.

Dr. F. K. Ainsworth has gone to Chicago to attend the annual session of the American Academy of Railway Surgeons, September 25, 26 and 27.

SOUTHERN CALIFORNIA PRACTITIONER.

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F. D. BULLARD, A.M., M.D.,
Editors and Publishers Southern California Practitioner,
107 North Spring street, Los Angeles.

Communications are invited from physicians everywhere; especially from physicians of the Pacifi Coast, and more especially from physicians of Southern California and Arizona.

EDITORIAL.

MISTAKEN DIAGNOSIS

"It is always a pleasant thing to be right, but it is generally a much more useful thing to be wrong. If you are right, all that you do, as a rule, is to confirm your previous opinion, your previous habit of reasoning, and your previous self esteem. But if you are wrong you generally gain in knowledge, and gain perception of the way in which your method of diagnosis needs improvement and the influence on self esteem is not likely to do any harm; at least that is my own experience, and I think I have observed it confirmed in others. But the result is dependent on deliberate effort. There is a strong temptation to smooth down error, and it is very wrong not to gain from it its precious lesson. It is more easy to fancy there is some accidental cause for the mistake than frankly to perceive that it is a fault. But if you make a deliberate effort to realize and face in your own mind the mistake you have made, to discern its cause, and to employ the perception as you can to remove the cause and prevent a like mistake in the future—if you do this, almost every error becomes one of the precious experiences of your practical life."

Such is the open confession of the recognized master in medicine, Gowers, in a lecture on mistaken diagnosis, as detailed in a recent publication of Clinical Lectures on Diseases of the Nervous System. With the above for a text he gives in detail a case, which at the first visit he diagnosed as locomotor ataxia, and for which he gave a mixture of quinine, belladonna and arsenic. At a subsequent visit some five weeks later he made another and more careful examination, and found that the patient was, and had been, suffering from chronic arsenical poisoning. Gowers changed his prescription. At the first visit he had not tested for sensibility, nor bared the skin, at the second he did both and discovered at once the arsenical pigmentation, emphasizing his early instruction that more mistakes are made by not looking than by not knowing.

The above recital impresses one that even the greatest are fallible, and that true greatness is a twin to frank truthfulness. All have no doubt had similar experiences, but not all have had the courage to say so. One fruitful source of error in diagnosis is the insistence by the patient on having his malady named—a condition which can often only be met by a description of the probable pathology as indicated by the present symptoms. It is better, as advised by Gowers, to discard all attempts at naming the disease, but to trace each symptom to its cause and endeavor to reason out the morbid process by a study of the symptoms and history, after one has all the details he can acquire by a faithful observation. Then only should the trouble be labeled this or that disease, and often even that must be provisional.

A recent discussion at the County Medical Society brought out the difficulty and importance of diagnosis in appendicitis, but it also laid great stress on the importance of operative conditions that might arise from appendicitis or any other abdominal pathological state, but still demand exploratory incision. Here it is a condition and not a definitely named disease that confronts the surgeon. Here it is for his judgment to say whether an operation is demanded, more than to say whether it is a case of peritonitis from a ruptured appendix, an abscess of the liver or what not. Nevertheless, the finding of the unexpected should stimulate the operator to endeavor to foretell that condition in the future. Unavoidable error, however, is no disgrace, but inexcusable inactivity either in medicine or surgery is wrong, a reasonable doubt demanding action. In medicine be sure you are right (if you can) and then go ahead, but in an emergency go in the most likely direction anyhow.

Dr. Ida B. Parker has located in Orange for the practice of her profession.

SERUM IN DIPHTHERIA.

M. Charles Richet gives in *La Revue Scientifique*, the following table, which shows in a forcible manner the progressive lowering of diphtheritic mortality in Paris since the employment of Roux's serum. On the same line, 1, 2, 3, etc., are entered the deaths of each corresponding period of fourteen days during the five years preceding 1895, and of two other years taken at random, viz.: 1884, and 1887. The figures are those of the first half of each year.

	1884	1887	1890	1891	1892	1893	1894	1895
1	97	81	55	74	49	83	75	26
2	106	42	51	78	60	70	57	15
3	102	73	81	76	46	51	53	23
4	112	90	81	89	61	58	52	23
5	145	84	83	93	66	62	65	22
6	145	84	92	73	74	75	74	27
7	121	78	93	76	56	62	54	15
8	114	81	71	85	58	60	61	17
9	106	74	86	69	55	61	52	19
10	94	66	74	59	56	49	49	24
11	103	73	66	62	73	53	45	15
12	88	54	52	43	33	52	30	9
13	67	55	78	33	55	46	38	4

Revue Internationalle, July 25, 1895.

EDITORIAL NOTES.

Dr. P. C. Remondino has been appointed surgeon for the Southern California Railroad in San Diego.

Hereafter no burial permits will be issued until the certificate of death is on file at the health office.

Dr. C. F. Taggart, formerly of Tulare, has moved to Los Angeles, and has taken an office in the Nolan-Smith Block.

Dr. F. R. Burnham, of San Diego, is taking an "outing" which is an "inning" in the New York hospitals, where he expects to remain about a month.

Drs. Richard J. Hall and G. W. Otto, of Santa Barbara, have started a new medical and surgical sanitarium in that city. Under such management it cannot fail to be a success.

Dr. Wm. Berry of Pasadena, in discussing "where shall our consumptive patients be sent," makes a strong point of the patients' environment, his bank account, his friends, and above all, the nerve and quality of his wife. From a good home to a poor boarding house is not a step towards health, and if the patient contemplates such a move he had better stay at home.

Dr. C. E. Winslow has taken an office in the Bradbury Block.

The matter of establishing a non-sectarian hospital in San Diego, which has been under consideration for some time by a number of women, is now to be undertaken.

Dr. F. M. Pottenger and family have returned to Redlands. As that climate proves beneficial to Mrs. Pottenger's health, the doctor will resume the practice of his profession there.

All physicians using diphtheria anti-toxin are requested to made full reports on the results obtained to the State Board of Health, to the end that reliable information may be secured regarding its efficacy.

Dr. George E. de Schweinitz of the Jefferson Medical college of Philadelphia is making a very extended study of the health resorts of the West. He will remain in San Diego for about two weeks, the guest of Dr. William A. Edwards.

Dr. E. A. Praeger will attend the meeting of the American Association of Obstetricians and Gynecologists at Chicago, in September, and will present a paper. He is authorized by the Los Angeles County Medical Association to invite them to hold their next meeting in Los Angeles.

The work of construction has been begun on the Medical College to be erected on Buena Vista street, between Virgin and Orr streets. The hospital is under the control of the Hospital Building Association, of which Dr. Brainerd is president, and Dr. McGowan is secretary.

Dr. M. F. Price is at the quarantine station at Indio, on the lookout for smallpox, which is reported in Texas, Arizona and Old Mexico. As the Mexican authorities are very rigidly quarantining all cases discovered, and as the Arizona health officer inspects all trains at Tucson, and Dr. Chenoweth, of the United States Marine Hospital service, does the same at Nogales, California is not likely to be visited by smallpox from the East.

Recently several well-known Pomona physicians kindly attended to an injured tramp, not only giving their services, but furnishing medicines, dressings, etc. As he was severely injured he was sent to the county hospital, where he died on the following day. Somehow or other the report got out that he met his death on account of ignorance or inhumanity of the Pomona doctors. Some provision ought to be made for the larger towns in the county to care for the indigent sick at the county's expense, and not expect everything from the ever-willing doctor, who often, as in this case, receives nothing but criticism in return for gratuitous services.

The Medical Department of the University of Southern California opens Wednesday, Oct. 9th, with the promise of the largest class they have ever had. The course will be begun in the old college building on Aliso street; the work on the new college will be advanced as rapidly as possible.

We would remind the physicians that the Los Angeles County Medical Association has resumed its regular meetings on the first and third Friday evenings of the month, at the Chamber of Commerce Hall. Two interesting sessions were held during September; at one, Dr. W. W. Beckett reported operations for radical cure of hernia, etc., and at the other, Dr. J. T. Stewart read a paper on appendicitis which elicited an animated discussion. Dr. F. F. Rowland, of Pasadena, has been present at both meetings. With our electric railway transportation it is possible for the Pasadena physicians to attend without serious inconvenience. They are always heartily welcome.

PAMPHLETS RECEIVED.

ADDRESS ON THE FOUNDING OF THE ILLINOIS HOSPITAL. By SETH SCOTT BISHOP, M D., Chicago. Reprint from Journal of Amer. Med. Assoc., June 29, 1895.

THE DILATOR IN DISEASES OF THE AIR PASSAGES AND THE EAR. By SETH SCOTT BISHOP, M.D. Reprint from the National Popular Review, July, 1895.

ON MOVABLE KIDNEY. By GEORGE BEN. JOHNSTON, M.D., Richmond, Va. Reprint from Transactions of Southern Surgical and Gynecological Assoc., 1894.

IMPERFORATION OF THE RECTUM. By GEO. BEN. JOHNSTON, M.D.

A CASE OF DIDELPHIC UTERUS WITH LATERAL HEMATOCOLPOS, HEMATOMETRA AND HEMATOSALPINX. By X. O. WERDER, M.D., Pittsburg, Pa. Reprint from Jour. Amer. Med. Ass'n, Aug. 11, 1894.

ABDOMINAL SECTION IN ECTOPIC GESTATION WHERE THE FETUS IS LIVING AND VIABLE, WITH REPORT OF A SUCCESSFUL CASE. By X. O. WERDER, M.D. Reprint from the Transaction of the Assoc. of Obstetricians and Gynecologists, 1894.

REPORT OF ABDOMINAL SECTIONS IN MERCY HOSPITAL FROM JULY 1 TO OCT. 1, 1894. By HUBERT A. ROYSTER, M.D., Resident Physician Pittsburg, Pa. Service of X. O. Werder, M.D. Reprint from Pittsburg Med. Review, Dec., 1894.

TREATMENT OF CHRONIC ENDOMETRITIS. By X. O. WERDER, M.D. Reprint from Pittsburg Med. Review, March, 1895.

FIRST ANNUAL ANNOUNCEMENT OF THE WOMAN'S MEDICAL COLLEGE, Kansas City, Mo.

A CASE OF OTITIC ABSCESS IN A DIABETIC, WITH A FATAL RESULT. By W. CHEATHAM, A. B. M.D. Louisville, Ky. Reprint from the Cincinnati Lancet Clinic, August 10, 1895.

CIRCULAR OF INFORMATION AND REGISTER OF STUDENTS OF GROSS MEDICAL COLLEGE, Denver, Colorado.

THE ANNUAL ANNOUNCEMENT OF THE NEW YORK POST-GRADUATE MEDICAL SCHOOL AND HOSPITAL FOR 1895-96.

THE LIVER AS AN ORGAN OF ELIMINATION OF CORPUSCULAR ELEMENTS. By GUSTAV FUTTERER, M.D. Reprinted from Medicine.

MONOLITHIC SUBWAYS, THE RANSOME SYSTEM, Ransome Subway Co., Monadnock Block, Chicago, Ill.

THE THIRTIETH ANNUAL ANNOUNCEMENT AND CATALOGUE OF THE MISSOURI DENTAL COLLEGE of St. Louis.

THE FIFTY-FOURTH ANNUAL ANNOUNCEMENT FOR 1895–96, AND CATALOGUE FOR 1894–95 of the St. Louis Medical College.

STATE BOARD OF MEDICAL EXAMINERS VS. MEDICAL COLLEGES. Reprint from Denver Medical Times, Sept., 1895.

BOOK REVIEWS.

INTERNATIONAL CLINICS: A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Genito-Urinary Surgery, Gynecology, Obstetrics, Opthalmology, Laryngology, Pharyngology, Rhinology, Otology, and Dermatology, by Professors and Lecturers in the Leading Medical Colleges of the United States, Germany, France, Great Britain, and Canada. Edited by Judson Daland, M.D. (Univ. of Penn.) Philadelphia, Instructor in Clinical Medicine and Lecturer on Physical Diagnosis in the University of Pennsylvania, etc. J. Mitchell Bruce, M.D., F. R. C. P. London, England, Physician to and Lecturer in the Principles and Practice of Medicine in the Charing Cross Hospital. David W. Findley, M. D., F. R. C. P., Aberdeen, Scotland, Professor of Practice of Medicine in the Univerity of Aberdeen, etc. Vol. II. Fifth Series, 1895. Philadelphia. J. B. Lippincott Company.

One third of this number is devoted to general medicine, another third to surgery, neurology and gynecology, each claim several articles, while the other specialities are put off with a paper or two apiece. Probably the most pretentious article in this number is the one entitled "Modern Methods of Diagnosis and Treatment of the Diseases of the Stomach," by Klemperer, Privat-Docent in Berlin. The finest illustrated paper is the one by Bradford of Boston on the treatment of flat foot. De Schweinitz has an interesting article on "sympathetic inflammation of the eye." Many of the lectures, of which there are forty, cover several subjects, so there are half as many again topics discussed.

Besides the above mentioned papers the following are the articles: in *medicine* some cases of children's diseases, thoracic complications of gastric ulcer, pernicious anaemia, gallstone, duodenal obstruction, non-ulcerative colitis, enlarged bronchial glands, Graves' disease, asthma, pulsating empyema, cystitis, splenic myelogenic leukemia; in *neurology*, brain disorders in school children, Menier's disease, favorable tabes dorsalis, sclerosis, aphasia, contracture following elbow-joint fracture; in *surgery*, septic ostitis, carcinoma, etc., cystoma, appendicitis, hernia, dermoid cyst, etc.; in *gynecology*, intestinal anastomoses, injuries to mother in child-birth, acute endometritis, prolapsus uteri, placental conditions; in *head specialties*, sympathetic affections of the eye, peritonsillar abscess, inflammation of tympanum, etc., obstruction of nasal duct; in *dermatology*, pediculosis, favus, electrolysis, and varicose eczema.

The articles are necessarily short, averaging a little over eight pages each, but they compass a great deal in a short space. All the patrons of the *International Clinics* will welcome this new instalment.

CLINICAL LECTURES ON DISEASES OF THE NERVOUS SYSTEM.—Delivered at the National Hospital for the Paralyzed and Epileptic, London, by W. R. Gowers, M. D., F. R. S., physician to the hospital; consulting physician to University College Hospital; formerly Professor of Clinical Medicine in University College. Philadelphia. P. Blakiston, Son & Co., 1012 Walnut st. 1895. $2.00.

In the first lecture on the principles of diagnosis, Gowers lays down this important rule: "Discard in the first instance all attempts to identify or to name, and

try instead to read the malady, tracing the symptoms to their cause and discerning the nature of the morbid process by their character and course." The second lecture on mistaken diagnosis starts out with the true but disagreeable statement: "It is always a pleasant thing to be right, but it is generally a much more useful thing to be wrong." For in the latter event the diagnostician "gains knowledge and perception of the way in which the method of diagnosis needs improvement." He gives an interesting case of chronic arsenical poisoning, which he, at the first visit, mistook for tabes.

The following are the subjects of the clinics: Argyria and syphilis, in which the dangers of silver are insisted upon, as well as the persistence of syphilitic symptoms; syphilitic hemiplegia, in which he advocates a course of iodide of potassium twice a year, three weeks each time, for eight years; bulbar paralysis, "one of the gloomy regions of the therapeutics of the nervous system"; facial paralysis, where he advocates galvanism as long as the nerve refuses to respond to faradism; facial contraction after palsy, which may follow immediately or be delayed some time after recovery. In this lecture Gowers gives another aphorism: "Next to knowing what can be done and how to do it, the most important thing to know is what can not be done."

There are three subjects which have double lectures: Locomotor ataxia, the causes of infantile epilepsy, and optic neuritis. The other subjects are acute ascending myelitis, foot clonus and its meaning, syringo myelia, treatment of muscular contraction, neuralgia, lead palsy and saturnine tabes.

The book, as is indicated from the quotations, is full of pithy points told by a master in medicine and in medical teach. The neurological works of Gowers are too well known to need praise, and this little work is sure to meet with a hearty acceptance.

The *Overland Monthly* for September promises the usual rich treat of Pacific Coast history and story. Mr. Wildman, the editor, continues his descriptive articles on the State under the heading of "Well-worn Trails," with one on the geysers of Sonoma county. The city of Stockton, which is now the center of all eyes owing to the building of the San Joaquin Valley Railway, is gracefully described and beautifully illustrated. Mr. Arthur McEwen contributes a story that will appeal to the hearts of all our merchants who have had dealings against their will with the blackmailing newspaper man. Mrs. Nesfield has a paper on "The Veterans of the Mexican War in California." It is illustrated with the portraits of a few of the few veterans that are now living among us. Mr. Vachell's remarkable story of San Francisco society and commercial life, "The Quicksands of Pactolus," is in its second number, and contains a vivid description of our famous magnates. In "Etc." the editor calls attention to the fact that all the public schools of the state are now supporters of California's only magazine.

MONTHLY METEOROLOGICAL SUMMARY.

U. S. WEATHER BUREAU, LOS ANGELES STATION.

Los Angeles, California. *Month of August, 1895.*

Date	TEMPERATURE Max.	Min.	Mean	Precipitation in inches and hundredths
1	83	57	70	0
2	83	62	72	T
3	79	60	70	0
4	85	59	72	0
5	84	59	72	0
6	83	60	72	0
7	83	60	72	0
8	79	62	70	0
9	80	60	70	0
10	78	58	68	0
11	76	58	67	0
12	78	58	68	0
13	83	57	70	0
14	82	56	69	0
15	88	55	72	0
16	87	58	72	0
17	86	58	72	0
18	83	59	71	0
19	82	56	69	0
20	80	57	68	0
21	83	56	70	0
22	80	56	68	0
23	81	56	68	0
24	78	58	68	0
25	76	56	66	0
26	72	58	65	0
27	71	59	65	0
28	74	53	64	0
29	74	51	62	0
30	77	51	64	0
31	77	52	64	

SUMMARY

MONTHLY RANGE OF BAROMETER:

Mean Barometer, 29.92.
Highest barometer, 30.07, date 2.
Lowest barometer, 29.79, date 7.
Mean Temperature, 69°.
Highest temperature 88°, date 5.
Lowest temperature 51°, date 30.
Greatest daily range of temperature 33°, date 15.
Least daily range of temperature 11°, date 27.

MEAN TEMPERATURE FOR THIS MONTH IN

1877 ..... 72°	1883. ..... 72°	1889 ..... 72°	
1878 ..... 71°	1884 ..... 73°	1890 ..... 73°	
1879 ..... 72°	1885. ..... 75°	1891 ..... 75°	
1880 ..... 69°	1886 ..... 75°	1892 ..... 72°	
1881 ..... 71°	1887 ..... 70°	1893 ..... 71°	
1882 ..... 73°	1888 ..... 73°	1894 ..... 70°	
		1895 ..... 69°	

Mean temperature for this month for 17 years, 72°
Total deficiency in temp. during the month, 4°
Total deficiency in temp. since Jan. 1, 288°
Prevailing direction of wind, West.
Total movement of wind, 2094 miles.
Maximum velocity of wind, direction, and date, 12m, W. 2nd.
Total Precipitation, Trace.
Number of days on which .01 inch or more of precipitation fell, 0.

TOTAL PRECIPITATION FOR THIS MONTH IN

1878	.00	1884	.00	1890	.03
1879	.00	1885	T	1891	.00
1880	T	1886	.21	1892	.01
1881	T	1887	00	1893	.00
1882	.00	1888	.08	1894	.01
1883	.00	1889	.01	1895	T

Average precip'n for this month for 17 years, .05.
Total deficiency in precip'n during month .05 inches.
Total precip'n from Sept. 1,'94, to date, 16.10 inches.
Average precip'n from Sept. 1,'94, to date, 18.40 inches.
Total deficiency from Sept. 1,'94, to date, 2.30 in.
Average rainfall for 10 wet seasons, 21.58 inches.
Number of clear days, 5.
" partly cloudy days, 25.
" cloudy days, 0.

NOTE—Barometer reduced to sea level. "T" indicates trace of precipitation.

METEOROLOGICAL SUMMARY SOUTHERN CAL., AUGUST, 1895.

STATIONS	TEMPERATURE Mean	Max.	Min.	Mean Barometer	Relative Humidity	RAINFALL Days	Am't	WEATHER Clear	Fair	Cld'y	WIND Direction	Total Mov't
Los Angeles	69.	88.	51	29.92	81.	0	T	6	25	0	W	2,094
San Diego	67.	78.	54.	29.92	79.	0	0	22	8	1	W	4,026
Santa Barbara	65.	78.	51.		79.	0	0	20	9	2	W	3,254
Yuma	91.	114.	64.	29.76	46.	0	T	27	3	1	SW	5,599
Arlington Heights	72.	97.	44.			0	.01	23	8	0	E & W	
Ontario	74.	96.	55.			0	0				W	
Pasadena	70.	92.	48.			0	0				W	
Redlands	77.	102.	55.			0	0				W	
San Bernardino	74.	100.	44.			0	0	23	4	4	W	
Santa Ana	77.	92	65.			0	0				W	

OBSERVERS.—George E. Franklin, U. S. Weather Bureau, Los Angeles; M. L. Hearne, U. S. Weather Bureau, San Diego; Hugh D. Vail, Santa Barbara; A. Ashenberger, U. S. Weather Bureau, Yuma. JAMES A. BARWICK, Director California Weather Service, Sacramento, Cal.

REGISTERED MORTALITY OF LOS ANGELES.

WITH SEX AND NATIVITY OF DECEDENTS.

Estimated Population, 80,000. *August, 1895.*

CAUSE OF DEATH	Total Deaths	Annual rate per 1000	SEX		NATIVITY				RACE		
			Male	Female	Los Angeles	Pacific Coast	Atlantic States	Foreign Born	Caucasian	African	Mongol
Deaths from all causes	75	11.25	44	31	12	9	42	12	72	2	1
Deaths under 5 years	18										
i. Specific infectious diseases	12	1.80	7	5		3	8	1	12		
ii. Diseases of digestive system	9	1.35	5	4	4	2	2	1	9		
iii. Diseases of respiratory system	18	2.70	9	9	1	2	11	4	16	1	1
iv. Diseases of nervous system	6	.90	5	1			3	3	6		
v. Diseases of circulatory system, blood and ductless glands	8	1.20	5	3	2		6		8		
vi. Diseases of genito-urinary org'ns	3	.45	2	1			3		3		
vii. Constitutional diseases	3	.45	2	1	1		2		3		
viii. Intoxication, violence, accidents	5	.75	4	1			4	1	5		
ix. Miscellaneous diseases	11	1.65	5	6	4	2	3	2	10	1	
i. Septicæmia											
Pyæmia	1			1			1		1		
Diphtheria	1		1			1			1		
Erysipelas											
Typhus fever											
Typhoid fever	4		2	2			4		4		
Malaria fever											
Scarlet fever											
Measles											
Cerebro-spinal meningitis	2		1	1		2			2		
Smallpox											
Tuberculosis	4		3	1			3	1	4		
Influenza											
Dysentery											
Syphilis											
Tetanus											
ii Diseases of the œsophagus											
Gastritis	1			1			1		1		
Enteritis											
Gastro-enteritis	1			1	1				1		
Cholera infantum	2		2		1	1			2		
Entero-Colitis	2		1	1	2				2		
Appendicitis	1					1			1		
Intestinal obstruction	1		1				1		1		
Diseases of liver	1		1					1	1		
iii. Membranous croup											
Bronchitis	2		1	1	1		1		1	1	
Pneumonitis											
Pleuritis											
Phthisis	16		8	8		2	10	4	15		1
iv. Diseases of brain	5		4	1			2	3	5		
Diseases of spinal cord											
Neuritis	1		1				1		1		
Epilepsy											
v. Diseases of heart	6		4	2	1		5		6		
Degeneration of arteries											
Aneurism											
Anaemia	2		1	1	1		1		2		
vi. Uraemia	1			1			1		1		
Cystitis	1		1				1		1		
Chronic Brigh't's disease											
Nephritis	1		1				1		1		
vii. Rheumatism	2		2				2		2		
Gout											
Diabetes											
Inanition	1			1	1				1		
Senility and Asthenia											
viii. Alcoholism											
Opium habit											
Suicide	2		2				1	1	1		
Violence and accidents	3		2	1			3		3		
ix. Tumors—malignant	2		1	1			1	1	2		
Tumors—non-malignant	2		2				1	1	2		
Other diseases	7		2	5	4	2	1		6	1	

F. W. STEDDOM, M.D., Health Officer.

OUR ADVERTISERS.

PEROXIDE OF HYDROGEN.

By J. P. Parker, Ph. G., M. D., of St. Louis, Mo. Published by the Annals of Ophthalmology and Otology, of St. Louis, Mo., April, 1895. (Abstract from *The Times and Register*, June 8th, 1895.) I have used peroxide of hydrogen quite extensively for cleansing discharging ears, the nasal and accessory cavities, and have tried all the brands of the preparation in the market, and once thought one manufacturer's make as good as that of another, and bought the cheapest as a matter of economy; but recent experience has taught me that the difference in quality is greater than the difference in price. After an unpleasant experience with a solution of peroxide of hydrogen which severely injured the mucous membrane, I bought and examined, chemically, a bottle of each preparation of $H_2 O_2$ in the market, and was surprised to find so much difference. Some are useless, and others worse than useless, because they contain too little available oxygen and too much free acids (phosphoric, sulphuric, hydrochloric). I now order Marchand's (medicinal) exclusively, because I find it contains the desired quantity of available oxygen and not enough free acid to be objectionable, and its keeping properties are all that could be desired.

By inquiry I learn that Marchand's is the preparation that is used by almost all surgeons, and it is considered by them the standard. My personal experience with peroxide of hydrogen confirms entirely the statement of Dr. J. P. Parker. I have used exclusively Marchand's brand until lately, when I experimented with hydrozone. Then I gave up entirely the use of peroxide of hydrogen and use hydrozone on account of its strength, which cannot be compared with any other brand, even Marchand's. I must say that the results which I obtained with hydrozone are most gratifying.—Ed.

ANÆMIC PATIENTS WHO HAVE MALARIAL CACHEXIA.—Dr. T. D. Crothers, editor of *The Quarterly Journal of Inebriety*, published under the auspices of the American Association for the Study and Cure of Inebriates, and who is an authority on neurosis, writes in his last number as follows: "Antikamnia and quinine are put up in tablet form, each tablet containing two and one-half grains of antikamnia and two and one-half grains of quinine, and is the most satisfactory mode of exhibition. This combination is especially valuable in headache (hemicrania), and the neuralgias occurring in anæmic patients who have malarial cachexia, and in a number of affections more or less dependent upon this cachetcic condition.

Husband your patients' strength with Codliver Glycerine while your curative treatment is correcting the disease.

All the salicylic acid used in Tongaline is made from the pure oil of wintergreen in the laboratory of the Mellier Drug Company, the proprietors of that excellent remedy for rheumatism, neuralgia and kindred complaints.

Did you ever try Codliver Glycerine in your run-down and emaciated cases?

GREAT SUCCESS IN ENGLAND.

J. A. De C. Williams, A.M., M. B., L. E. R. C. P. I., Killucan county, West Meath, England, writes:

"I have much pleasure in informing you that I have obtained more than the average success met with in drugs when I used PIL. APHRODISIACA (LILLY), more especially in cases of nervous prostration and sexual debility, patients often wishing to continue the pills after cure, they are so pleased with their effectiveness."

Have you ever tested Codliver Glycerine in actual practice?

Messrs. Theodore Metcalf Co., Boston Mass.:

Gentlemen.—I have received such benefit from your new medicine, Kola-Koloid, that I cannot refrain from sending you an unsolicited testimonial. I have tried in headache and nervous dyspepsia and it has never failed to afford relief. For the horrible black despondency attendant on nervous prostration, it is a magical remedy. It has controlled and regulated the action of my irritable heart as nothing else ever did. Last and greatest, I have used it for fatigue and exhaustion following overdosing, and have found myself so refreshed and reinvigorated as to be ready for any new exertion. Best of all, there has never been the slightest evil after-effect, but a permanent gain in strength and general health.

Very sincerely yours, R. Y. E. JOHNSON, M. D.

Pardeeville, Wis., August 12, 1895.

BROMIDIA.—The steady increasing use of Bromidia by the profession in all parts of the world demonstrates its great value as a hypnotic. If human testimony is worth anything at all, then Bromidia must unquestionably be the best and safest of all sleep producers. Dr. Federico Tommasi, of Maggranico, Italy, on July 24, 1893, writes: "Although as a rule I do not approve of specialties, still when I find an ideal one, both as regards therapeutic combination and pharmaceutical preparation, easily administered, prompt and certain in action, *I value it.* Bromidia fulfills all these conditions. I have obtained especially gratifying results by its use in two cases—one, heart disease, the other, acute lumbago. In both cases it promptly relieved the pain, produced tranquil sleep, with no disagreeable after-effects."—*Memphis Medical Monthly*, June, 1895.

GREAT POWER OF GASTRIC JUICE.—A German Physiologist has lately declared that the dog secretes enough gastric juice every twenty-four hours to digest an amount of proteid matter equal to its own weight. Paskola is not pure gastric juice, and will not quite illustrate the statement that a bottle of it will digest an amount of the proteid matter equal to the weight of an ordinary individual. Nevertheless, it is a fact that Paskola has definite digestive powers, which can be easily ascertained by observing the conditions governing natural digestion. Should any of our readers desire to test this question themselves, they can obtain printed directions by addressing The Pre-Digested Food Company.

SANMETTO.—Dr. Ben. H. Brodnax, of Louisiana, says in *The Charlotte Medical Journal*, (March, 1895,) "I am satisfied that SANMETTO is the safest, pleasantest and most effective genito-urinary alterative and tonic I have ever used."

SKIN DISEASES.—(Heine Marks, M. D., Superintendent and Surgeon in charge of the St. Louis City Hospital; member of the American Medical Association; member of the Missouri State Medical Society, and ex-member of the Board of Managers of the House of Refuge.):

Some time ago, having had my attention drawn to the claims made by the promotors of Pineoline, of its efficacy as a stimulant and antiseptic agent in the treatment of various diseases of the skin, I concluded to give it a trial in the wards of the St. Louis City Hospital. I was the more induced by the fact that its composition included an active derivative of the pine, which has long been known to possess healing qualities of no mean order. I was then suffering from Seborrhoea of a chronic nature of the scalp, face and arms, and I somewhat reluctantly decided to try the preparation upon myself as an experiment, to which I could not submit any of my patients. I had, however, but little faith in its efficacy, having previously almost exhausted the pharmacopeia in the way of external and constitutional treatment, without securing any permanent relief. It was practically because I had nothing else to try that I concluded to use the Pineoline. I applied it locally three times a day, massaging the parts affected for from five to ten minutes with each application, and to my unqualified surprise and delight, in two weeks the eczema has entirely disappeared, nor has it since returned. During the time I was using the ointment I merely supplemented the treatment with a simple laxative. Subsequently I used the Pineoline in from twenty to thirty cases of the various forms of eczema, which came under my charge as superintendent of the St. Louis City Hospital, always with the same relatively admirable results.

PHYSIOLOGICAL DEVELOPMENT AND FUNCTION OF PROTONUCLEIN.

Some confusion has arisen, as is always the case in physiological products, over the nomenclature, of which there is always a "confusion of tongues." Nuclein as a physiological principle has long been known to the practical physiologist, but it has been, as it were, laid aside for a time until its exact belongings and destination were fully established, and for so long a time no attempt has been to determine its relationship to the organisms, although it has met at almost every stage of nutrition and assimilation. The discovery of the true cellular character of the White Blood Corpuscle, or Leucocyte, opened the way for the full understanding of the nature and function of Nuclein. It having been proved that all the proteids which are delivered to the blood from the digestive tract are taken into the Leucocyte, there mixing with its blastema, it was further shown that the Nucleus and Nucleolus of the Corpuscle by some molecular influence wrought the change the result of which was the substance Nuclein. When the cell became so charged with it that it could contain no more the cell-wall burst, the Nuclei and Nucleoli (for it is in the Multinuclear Leucocytes that Nuclein is formed) come out as perfect cells, and where we had only one Leucocyte we now have as many as there were Nuclei in each ruptured cell. In this way the Nuclein is distributed rapidly to the several tissues, each individual cell taking what is necessary for its own nutrition and structure, and the rest going to the others along the line of circulation. Thus it is seen that Protonoclein, which, as we have said, is the combination of all the available Nucleins of the body, is the true *tissue-builder* of the organism.

Besides this, any toxic germ invested by Nuclein thus poured out from the Leucocyte is molecularly changed and rendered atoxic by the molecular disturbance thus made, and in this way it becomes also the natural *antitoxic* agent of the organism, which destroys the toxic power of the thousands of poisonous germs which come into the body every moment and pass away, apparently without inflicting material harm.

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ORIGINAL.

THOUGHTS ON OPIUM.*

BY DR. JAMES P. BOOTH, SURGEON TO THE A. & P. R. R. NEEDLES, CALIFORNIA.

Mr. President and Gentlemen:

In these progressive days of new remedies in their varied tasteless and palatable forms, it seems almost a defiance hurled at nineteenth century medicine to write of so old fashioned a remedy as opium; and yet how often do we cast aside the pillets and tablets and sweet-scented droplets to take up the old reliable sheet-anchor, opium, to the delight of our relieved patients and the satisfaction of ourselves. Surgeons may boast of their brilliant laparotomies for the successful cure of dreaded appendicites; obstetricians herald their wonderful Caesarian sections whereby children are not born, but are from their mother's "wombs untimely ripped." Gynecologists tell us of their startling uterine amputations; and specialists prate of their skilful work, with eyesight restored, hearing reestablished and miraculous rhinoplastic renewal of lost members of the human body; but the man who relieves the pain and who relieves it speedily and effectually is the man who will be sought after and who will oftenest hear the grateful "God bless you" from a suffering fellow being. An old and beloved friend of mine, who before his death was an ornament to our profession, on one occasion laid down this rule to me: "In writing or speaking on any subject in medicine and surgery be sure and begin at the beginning whether you end at the ending or not." To "begin at the beginning" of opium may almost savor of an insult to your intelligence and early medical schooling, but out of respect to the memory of the dear old friend above referred to, I will briefly and cursorily touch upon the history of the drug, trusting that as a review of our early teaching but serves to strengthen our knowledge of the subject reviewed, this repetition of a lesson so well known and understood may not at least prove tiresome.

*Read before The A. & P Railway Surgeon's Association Oct. 2nd, 1895.

According to Linnaeus, opium is the juice, inspissated by spontaneous evaporation, obtained by incision from the unripe capsules of the poppy—Papaver Somniferum—grown in Asia Minor. "It is uncertain," says Pereira, "at what period opium was first known or introduced into medicine. Hippocrates recommends the "mekonion" or poppy juice in a disease of the uterus, and Dioscorides on the authority of Erasistratus, tells us that Diagoras, who was contemporary it is supposed with Hippocrates, condemned the use of opium. These are I believe the most ancient Greek authorities who speak of this substance, and it is impossible I think to arrive at any accurate conclusion from their remarks whether opium had or had not been known long before their time, though Alston infers from the little use made of it by Hippocrates, as well as from Diagoras condemning its use in diseases of the eyes, that its virtues were not known long before him. Dioscorides and Pliny mention that the expressed juice of the heads and leaves is termed 'meconium' and that it is much weaker than opium. Theodore Zwinger, Sprengel and others have supposed that the 'nepenthes' of Homer was opium."

"The mode of extracting opium, is to a certain extent similar in all countries, and consists in making incisions into the half-ripe capsules and collecting the exuded juice when concreted into tears. After collection the masses of tears are either worked up into a homogeneous mass in a mortar or otherwise, as in Egypt and India, or the separate portions are merely put together as in Asia Minor and Persia."

Among the natural alkaloids found in opium we have morphine, hydrocotarnine, codein, narcotine, the baine or paramorphia, narcein, laudamine, meconine, codamine, papaverine, rhoeadine, cryptopine, laudanosine, and lanthopine. Besides the above enumerated alkaloids there is a well known derivative called apomorphia, which is obtained from morphine, and which is valuable as a reliable and speedy emetic.

I have no desire to be considered an enthusiast on the subject of this drug, much less do I crave the notoriety of riding a hobby, but I do most emphatically assert that when we leave opium in our wild search after therapeutic strange gods, we are leaving the most potent god of them all. In the practice of medicine, I have found opium the conqueror of pain. In stomach pain, whether simple or neuralgic, or excited by the presence of food, or due to cancer or ulcer, opium is the remedy for its relief. Inflammatory pain due to corrosive poisons, is relieved by opium. In the excruciating agony which accompanies the passage of gall stones or renal calculi nothing so quickly quiets the patient as opium. In cholera morbus the hypodermatic injection of a quarter to a half grain of morphia is as nearly a specific as is sulphur for the itch. For nausea and vomiting opium comes to your rescue when all other remedies have proven useless. In that most unmanageable affliction "mal de mer" or sea sickness, opium gives the very best results. Let me instance a case of the latter, fresh in my memory. An elderly maiden lady had just made a trip from Honolulu to the Pacific Coast, and was sea sick from the time she embarked until she landed in California. Without tarrying to recover from the effects of her voyage, she took the train *en route* to Ohio, and on the second day arrived in Needles exhausted, where she left the train, and took to her bed, pale, weak and limp. The vomiting was incessant, and the total *abandon* so frequently seen at sea was strikingly illustrated. I was called to the case and began at once the administration of medicine to stop the vomiting. Mustard plasters were placed over the region of the stomach, minute doses of calomel, alkaline and and acid drinks, champagne, cracked ice, enemata, and everything that could be thought of or suggested were rung in, but all to no

effect, and the case continued as it had begun until the third day. On this day I prescribed the following:

℞

Morphiæ Sulphatis.....gr. i.
Creosoti.....gtt. iv.
Aquæ Cinnamoni.....fld. oz. i.
Ft. Sol.
Signa–

Give a teaspoonful every half hour until 3 doses are taken, then give it every hour.

From that time on the vomiting ceased and though weak and weary the good lady was able on the following night to take the train and return to her home and friends on the coast.

In dysentery with griping, and tormina and tenesmus, what is better to relieve these pains, to stop the discharges of blood and mucus, and relieve the sufferer than the old fashioned prescription of salts and laudanum? "Opium is undoubtedly the most important and valuable remedy of the whole materia medica," says Pereira. "For other medicines we have one or more substitutes, but for opium none. Its good effects are not as is the case with some valuable medicines, remote and contingent, but they are immediate, direct, and obvious; and its operation is not attended with pain or discomfort. Furthermore it is applied and with the greatest success to the relief of maladies of every day occurrence some of which are attended with the most acute suffering. These circumstances with others not necessary here to enumerate conspire to give opium an interest not possessed by any other article of the materia medica. We exhibit it under certain regulations to mitigate pain, to allay spasm, to promote sleep, to relieve nervous restlessness, to produce perspiration, and to check profuse mucous discharges from bronchial tubes and gastro-intestinal canal. But experience has proved its value in relieving some diseases in which not one of these indications can be at all times distinctly traced."

In the pain of rheumatism, an hypodermatic injection of morphia will relieve your patient and give your anti-rheumatic remedies time, and a better opportunity to have their curative effect. In the restlessness and delirium of disease in general, when you wish and pray that your patient may have just one night of "tired nature's sweet restorer, balmy sleep," a good dose of morphia will procure it, the sufferer will bless you as he murmurs:

"O gentle Sleep, whose lenient power thus soothes
Diseases and pain, how sweet thy visit to me
Who wanted thy soft aid; Blessing divine
That to the wretched giv'st wish'd repose
Sleeping their senses in forgetfulness."

In cases of weak and dilated heart, opium in small doses is a valuable cardiac tonic, and if administered in conjunction with digitalis we have reason to believe that it will obviate, at least to a great degree, the danger attendant upon the administration of the latter drug. In intermittent fevers, it is the custom in the swampy regions of the southern states, to ward off an expected chill by a full dose of opium, given in time to have its effect before the cold stage sets in. The success attending this practice is remarkable. Says the great Bartholow. "Opium is the most important agent which we possess in the treatment of various inflammations. Its efficacy depends upon several factors; it relieves pain, quiets restlessness, and thus removes from the inflammatory process one of its most

important elements, viz.: an irritable and paretic state of the nerves of the affected part. Besides these effects opium raises the tonicity of the vessels, helps to maintain the continuity of the blood current, and hinders the migration of the white corpuscles of the blood. It is especially in inflammations of the serous membranes, that its highest utility is manifest e. g. *pleuritis*, *peritonitis*, *arachnitis*, etc. Good reasons exist for believing that the hypodermatic injection of morphia will sometimes cut short (jugulate) these maladies, if administered at their outset. If the period for obtaining such a fortunate result has passed, the course and duration of these diseases can be greatly modified by the judicious use of opium." In *coup de soleil*, "thermic fever" or sunstroke, in chorea, acute mania, uremic convulsions, and epilepsy and epileptiform convulsions, cardialgia, *tic-douloureux*, brachialgia, gastralgia, hepatalgia, nephralgia, sciatica and pelvic neuralgia, the hypodermatic injection of morphia is not only palliative, but in many of these disorders, is absolutely curative.

In surgery, what more reliable remedy have we than opium? The maimed and mangled patient whose life hangs by a mere thread is quickly calmed and quieted by the timely administration of an hypodermatic injection of morphia. Shock, that dread result of extensive injury is prevented or mitigated by the use of opium, while the consequent inflammation is checked and the pain is quieted. Bartholow recommends the united action of morphia and atropia in surgery, believing that their combined action renders safer and more prolonged the ether or chloroform narcosis. It has been my custom in all cases of surgery requiring chloroform or ether, to give the patient from an eighth to a quarter of a grain of morphia previous to the inhalation of the anesthetic, and whether *post-hoc*, of *propter-hoc* I have as yet the first serious untoward result from this method or administration to chronicle.

For external use as in liniments, ointments, etc., opium is almost indispensable, and in conjunctivitis, morphia in solution with distilled water in the proportion of from four to eight grains to the ounce, gives excellent results. For iritis and other inflammatory troubles of the eye morphia in conjunction with atropia and sulphate of zinc is a most excellent remedy. Ear aches and tooth aches are greatly relieved by the local use of opium in some of its forms. We all know by observation if not by experience how efficacious a hot infusion of opium is to a swelled testicle, and how soothing opiate suppositories are in spasmodic stricture, diseases of the prostate gland, and chordee.

But it is in obstetrics more than in any other branch of practice that I have had cause to bless opium and its preparations. You are in the lying-in chamber of a recently acquired patient whose confidence in you is *nil*. The "grinding" pains come thick and fast and the poor woman mingles her impatient cries of pain with the dissatisfied grunts of a liege-lord who looks at you in a significant silence which fairly shrieks "why don't you do something?" A quarter of a grain of morphia quiets the pains, gives courage to the woman and confidence to the whole household. I am just now reading the report of several cases given by Dr. C. M. Smith of Dixon, Kentucky, in the *Medical Progress*. Let me repeat them to you. Says the doctor: "I give morphine in obstetrical cases to accomplish the following results:

1. To relieve the cutting pains and quiet the patient in the first stage of labor. 2. To give the patient rest, and nature a chance to recuperate her wasted strength in tardy labor. 3. To stimulate the contractions of the uterus in certain slow labors. 4. To relieve false pains.

Case 1. Mrs. H. Age 18, primipara: Os slowly dilating, suffering great pain, restless, up and down and screamy; her friends appeared very uneasy. I gave

her ¼ grain morphine sulph. and within an hour she was as quiet as a veteran, and "all went merry as a marriage bell." Case 2. Mrs. M. Age 26, multipara. Been in labor fourteen hours, pains slow and inefficient, gave morphine ⅓ of a grain. Rested well two hours or more, when her pains came on with renewed energy and she was delivered of an eight pound boy in 80 minutes after her pains commenced. Case 3. Mrs. H. Age 20, multipara. Found patient in second stage of labor, but pains weak. Gave morphine ¼ of a grain and was ready to leave for home in about an hour. Case 4. Mrs. T. Age 36, multipara. Was called three miles into the country. I examined patient and found os not dilating. Left several doses of morphine for her to take, one hour apart until easy, then to let me know when her pains commenced again. I have not heard from her from that day until this."

I would not have you think, had I the reasoning power to convince you, that opium is a "cure-all," for it is not, and neither is there any other drug so specially endowed; but I would have you think with me, that while we are flooded with new and seductive looking remedies, that it is not best for our success to entirely overlook the old reliable ones, and especially that one for which Pereira says, "We have no substitute." I think with Voltaire that "Nothing is more estimable than a physician who, having studied nature from his youth, knows the the properties of the human body, the diseases which assail it, the remedies which will benefit it, exercises his art with caution, and pays equal attention to the rich and poor."

DEMONSTRATION OF APPARATUS.*

BY ALBERT ABRAMS, A.M., M.D., PROFESSOR OF PATHOLOGY, COOPER MEDICAL COLLEGE, SAN FRANCISCO, CAL.

The announcement that my demonstration to-night was to embrace recent apparatus used in pathology and bacteriology was correct, but I regret being unable to fulfill my engagement in that respect, owing to the unfinished state of your laboratory. Instead, I will demonstrate some apparatus which may be specified as recent.

CYSTOSCOPY. The electro-endoscope of Nitze is unquestionably the most practical instrument for conducting a cystoscopic examination. Its construction is based on the principle, that by means of a catheter-like instrument, light is conducted into the bladder and by means of an optical apparatus, the illuminated area can be seen. The instrument which I show you represents the cystoscope as it is to-day, a practical instrument making cystoscopy easy. The light is furnished by a mignon lamp. With the instruments made formerly, this lamp was firmly attached, a condition which necessitated a return of the instrument for repairs whenever the lamp was burned out. Now, the lamps can be bought separately inclosed in a metallic capsule and can be attached by the physician himself whenever necessity demands, which is frequently the case. A requirement of the greatest importance in cystoscopic examinations is to obtain a medium in the bladder free from admixture so that the rays of light are not deflected before falling on the mucous membrane. When tumors are present in the bladder or when blood or pus flows through the ureter, a special instrument is needed for a proper cystoscopic examination. Such an instrument is called an *irrigation* cystoscope, and consists essentially of a fine tube opening close to the prism of the instrument, through which water may be pumped at intervals, thus clearing, if only momentarily, the field of vision. To conduct a cystoscopic

*Before the San Francisco Medico-Chirurgical Society, April 1, 1895.

examination properly, much experience is necessary and as a preparatory medium for education in this respect nothing can supersede, the bladder phantom. As you see, the interior of the phantom is in all respects made to duplicate the normal bladder, even to the color of the mucous membrane and the distribution of blood vessels. Through a little opening some colored fluid resembling blood or pus may be injected at intervals, so as to simulate the appearance which blood and pus present when they enter the bladder through the ureters. The use of the cystoscope as a means of inspecting the openings of the ureters is of great importance to the internal pathologist, who wishes to know something about the condition of the kidneys, to determine from which kidney pus or blood comes. This is not always easy as the picture is often obscured. By means of a new instrument which Nitze has constructed, it is now possible to catheterize the ureters and thus obtain urine from either kidney. By the use of photographic apparatus attached to the cystoscope, pictures of the bladder interior can be taken. I will show you a series of cysto-photograms taken by this instrument.

Endoscopy of the Urethra. Inspection of the urethral mucous membrane is theoretically easy but practically difficult. Its value is questioned by many authorities on genito-urinary surgery; of late pathologico-anatomical investigations show that diseased processes in the urethra, in the majority of cases are situated under and not in the mucous membrane, therefore eluding inspection. Notwithstanding these objections, a recent work by Oberlaender advocates the practicability of urethral endoscopy and when we look at the pictures found in his book, we must confess, that at least to him, endoscopy is a practical and easy method of examination. I will show you two recent endoscopes, one called the Otis improved, and the other that of Posner of Berlin. By means of the Otis instrument light is thrown into the urethra by means of an electric lamp attached to the urethral tube. While the instrument is of great value, it is less practicable than the simple glass tubes of Posner, which have a looking glass interior. They can be introduced without a conductor, and, owing to their blunt ends, may be pushed forward or backward without causing the patient any inconvenience. By means of a head mirror, light can be reflected into the urethra. By means of this *electric head light* which is of recent construction, a light of great intensity can by obtained.

Urethral Strictures. For the detection of strictures, no instrument equals the soft olive pointed bougies of Posner, one of which I will pass around for inspection. Strictures which elude detection by the conventional instruments are positively determined by the olive tipped bougies as I have frequently assured myself at the clinic of Prof. Posner in Berlin. By means of this instrument, we can locate an anterior or posterior urethritis. We can also determine very easily, the length of certain portions of the urethra. This cannot be accomplished so readily by any other instrument. The posterior urethra from the compressor to the sphincter vesicae measures from 4 to 4½ cm. Any increase in measurement indicates positively hypertrophy of the prostate.

Gastrodiaphane. I demonstrated this instrument at a previous meeting. Here, as with the cystoscope, extra lamps may be bought and attached in case of necessity by the physician himself.

Phaneroscopy. This is a method described by Liebreich for diagnosing *lupus vulgaris*. This is, as you well know a chronic affection of the skin characterized by the development in the corium of red or reddish brown nodules. The nodules can be detected at an early stage of development by means of the phaneroscope which consists simply of a plano-convex lens concentrating rays of light on the

area to be examined and by means of piece of glass in a frame, the area is to be compressed rendering the part anemic.

VITROPRESSIO. This is referred to by Liebreich as a method of examination whereby certain pathological conditions of the skin can readily be diagnosed. The principle consists in the fact, that by pressure, the skin is rendered ischaemic and through the glass redness due to extravasations of the blood can be seen. This procedure which Liebreich, singular to say, has dignified as a new method of examination has been used for years by many clinicians. Thus in icterus, an object glass applied with slight pressure to the lips, will render the latter anaemic and through the glass, the yellow color of the lips will become more evident.

THE CENTRIFUGAL MACHINE. This apparatus is designed for the purpose of separating the corpuscular elements of fluids by centrifugal force. Instead of waiting 24 hours for a sediment, we can obtain one in two to three minutes by this force. The centrifugal machine makes about 2000 revolutions in a minute and can be operated by hand, electric or water power. The centrifugal apparatus which you here see is one of the simplest of its kind and is operated by water power.

THE HAEMATOKRIT. This instrument is so constructed as to separate by centrifugal force, the blood corpuscles from the containing serum, the former being of greater specific gravity. To obtain the volume of corpuscles, the blood removed by a measured pipette is mixed with a two and a half per cent. solution of potassium bichromate to prevent coagulation and then rotated. The percentage of blood corpuscles can be directly read on the periphery of the tube which receives the blood and diluting fluid.

OPENING THE SKULL. In post-mortem examinations the removal of the calvaria constitutes a tedious procedure. To expedite its removal, I have had constructed a circular saw, which can be operated by electricity, or in absence of the latter force, can be connected with a simple lathe.

EXAMINATION OF SPUTUM. It is often necessary to prepare many cover glasses in staining for tubercle bacilli. The inconvenience of handling each cover glass separately can be obviated by the apparatus which I here show you. It consists of nine brass frames each of which is capable of holding ten cover glasses. The latter after being spread with sputum and dried are introduced into the frames and the latter are immersed in the staining solution contained in large test tubes. Without removing the cover glasses from the frames, they can be successively introduced into various fluids. The value of this apparatus in expediting work when a number of examinations must be made as in hospitals is readily seen.

431 Geary Street.

PSEUDO-MENINGITIS.

BY JOHN C. KING, M.D., BANNING, CAL.

Child, male, six months old, raised on artificial food. Mother delicate. Father died of tuberculosis prior to child's birth.

July 26. Diarrhea for some days, irritable, no fever.

July 27. Symptoms improved.

Aug. 1. Relapse; fever, frequent liquid stools, very irritable.

During my absence Dr. Hauverman visited the patient for several days; upon my return I found, Aug. 4, diarrhea ceased. Temperature 102½, skin cool, head hot, nape sensitive to pressure, marked opisthotonos, head rolling from side to side, mouth hanging open and tongue protruding and rolling; occasionally cephalic

cry, at other times exceedingly restless and irritable. Fontanelle open, bulging and pulsating, abdomen retracted. Urine infrequent and scanty, leaving brick-dust stain on diaper. The child has a large head and poorly nourished body.

Diagnosis: meningitis. Case progressed unfavorably for several days.

Aug. 8, temperature 103. Cerebral symptoms accentuated. During previous night aroused from sleep at very short intervals giving utterance to shrill cries. Much prostration. Dr. M. F. Price saw patient with me. Joint diagnosis: meningitis. Dr. Price extended his examination to prepuce, which I had overlooked. Found phymosis, with pin-hole orifice. The doctor advised immediate circumcision. I declined on account of, as it seemed to me, obvious reasons.

Aug. 9. Patient worse. Carefully selected remedies inefficacious. Prognosis unfavorable. Decided to circumcise. Did so at once, under cocaine, Dr. Hauverman present. Same day, at 7 P. M., child free from fever, urine abundant, slept quietly 2 hours during afternoon, no sudden cries, rolling of head, etc., no pulsation nor bulging of fontanelle. In short, improvement was sudden, continuous and complete. That true meningitis can be cured by circumcision passes credence, notwithstanding modern apotheosis of reflexes.

That a case of "encephaloid," so closely resembling meningitis as to be indistinguishable from it by three ordinarily well posted doctors, did recover immediately after the patient was circumcised is a fact.

APPENDICITIS.*

BY J. TAYLOR STEWART, M.D., LOS ANGELES, CAL.

The appendix is an organ of evolutionary and pathological interest. It is a useless rudiment, which is a constant menance to the life, health and happiness of its possessor. Undoubtedly, its diseases have the antiquity of man's creation; but not until recently have they been generally recognized; their importance and pathology understood.

One feels constrained to apologize for bringing before an assembly like this a subject that has been, in the past few years, so frequently and fully discussed, and concerning which it is not hoped to add any new aspect. Recognizing the great frequency with which we are brought in contact with appendical disease, its gravity, its high mortality, the want of unanimity relating to its pathology, dangers and treatment, it must be regarded as one of the most difficult and anxious of clinical problems. We have good reason to believe that, until recent years, thousands of lives were lost from appendicitis under the diagnosis of peritonitis, inflammation of the bowels, etc., etc. We are now as convinced that peritonitis has no existence as an idiopathic affection as we are that appendicitis is the cause of an overwhelming majority of the cases formerly regarded, and now too often diagnosed as peritonitis, and is the cause of nearly all the diseases of the ilio-cecal region.

The relative anatomical position of the organ, with its unfortunate confirmation, renders it the easy victim of disease; being a rudimentary continuation of a dependent portion of intestine, which is a kind of fecal diverticulum, especially exposed to the effects of constipation and other obstructive causes, with its small and irregular lumen and resentful mucous membrane, the etiology is not difficult to appreciate. Irritation of its lining, with consequent engorgement, may speedily result in occlusion, strangulation and necrosis. Then, trauma is, in its

* Prepared for the Medical Society of the State of California, and read before the Los Angeles County Medical Association, Sept. 20, 1895.

broad sense, the common cause. The traditional grape seed—not often observed, however—and other foreign bodies, the irritation of fecal concretions are traumatic agencies, easily exciting inflammatory action, which is exudative and septic.

The pathology may be dismissed in a few words. We assume that appendical inflammation is always exudative and aseptic; that the bacteria coli commune may be innocuous in the cavity of a healthy peritoneum or brain; but, in the presence of exudative and inflammatory processes, they are patho and pyogenic. As concerns the appendix, the chain of pathological events is not complete. Septic invasion of its peritoneal covering may result in general peritonitis, or, more commonly, in the production of a limiting wall, shutting off the suppurating, septic and necrosed appendix. A large abscess may be thus walled off by this protective process.

We now approach a subject of far greater practical interest than the etiology. The *diagnosis* is not unusually a matter of great difficulty, but is occasionally impossible. Certain symptoms are highly denotive of this disease. Pain in the appendical region, localized tenderness on pressure, elevation of temperature, and quickened pulse render a diagnosis probable. The existence of a tumor in addition renders it almost conclusive. Pain in the beginning is not very reliable. It may be erratic, may be anywhere, may be everywhere. Tenderness is a more reliable symptom, but may be absent. All the symptoms may be as perplexing. It has not been my experience to gain information from rectal examination; but it should not be neglected in the more obscure cases.

Whilst none of these symptoms are unequivocal, there is usually but little difficulty in reaching a diagnosis. In rare instances of difficult or impossible diagnosis, with pronounced indications of serious intra-abdominal mischief, no one would hesitate to make a diagnostic incision. Great surgeons have opened the abdomen for the removal of a diseased appendix to find the organ in perfect health. Great surgeons have done celiotomy for tumor and found a gravid uterus or phantom. This cannot be argued against exploratory incision in any serious case where diagnosis is otherwise uncertain or impossible.

It is impossible to determine the prognosis even approximately. It is fair to say the mortality under any plan of treatment is much greater than is generally supposed. Statistics are most unreliable, coming from most untrustworthy sources, meager as to information of diagnosis, and direct cause of death. Under medical treatment, twelve or fifteen per cent. is not too high an estimate of mortality. This, increased by the mortality of appendical cases reported as peritonitis, etc., must reach fifteen or twenty per cent. The mortality under judicious surgical treatment remains to be shown. There is, in truth, no data for determining from statistics the mortality attending proper surgical management; nor, indeed, can there be until appendicitis, in every stage, shall be regarded a surgical case.

There is no disease in which the pathology more clearly indicates the treatment than appendicitis. At the earliest moment at which a diagnosis can be made, it is known that in the peritoneal cavity there is a septic organ, which, at best, is functionless; always dangerous; and now placing our patient in great peril. The removal of the organ involves an operation attended by a very small mortality, and secures to the patient perfect cure and eternal immunity. This same pathology teaches the futility of the orthodox medical treatment; barring a few exceptions — the ordinary surgical limitations as extremes of age, serious disease of important organs and so on—appendicitis is a disease demanding simply and only surgical consideration. Medical men and sensible surgeons

have been disgusted by the mania for operations evinced by would-be surgeons, that embryonic class of operators, who, on account of the simplicity of abdominal section, have removed normal, or slightly diseased ovaries, through a morbid desire for surgical distinction, unsexing and mutilating thousands of good women. Here, there can be no parallelism; in the one case useful and important organs are wantonly sacrificed; in the other, whether necessary or not, a useless and dangerous appendix. This sinful and disgraceful practice has been somewhat responsible for the too slow growth of appendical surgery.

Assuming that our knowledge of pathology should be our guide in the rational treatment of every disease, it is difficult to appreciate the philosophy of the popular medical treatment of appendicitis. In the matter of anatomy, physiology, and pathology, the appendix is peculiar. For anatomical reasons, it cannot be the subject of simple, harmless, catarrhal conditions as can other regions of the alimentary tract. It is not a vascular organ, resisting well the invasion of disease and the operations of pathogenic influences and capable of prompt and complete resolution. Pathologists teach us that mucous membrane at its cecal extremity is peculiarly vulnerable and that, on account of this and the anatomic constriction, slight catarrhal conditions must cause at once dangerous stenosis, a condition which does not obtain so readily elsewhere. Admitting the possibility of simple catarrhal appendicitis with perfect resolution, it is doubtful if it often exists, or that we can in any case contemplate it with any serenity. It would be wise to ignore such a classification for one reason, at least, that it is impossible, absolutely impossible, for any one to make a diagnosis of catarrhal appendicitis early, if at all; and it is upon this early diagnosis that the hope of minimizing the mortality depends. As to resolution, it is not so complete as some would have us believe. The persistent tenderness and the frequent recurrence of inflammatory attacks do not inspire our confidence. It is rather subsidence and quiescence too often to be fatal in the end.

Let me here furnish you a case of supposed catarrhal appendicitis. In consultation, I saw a gentleman, aged seventy, pulse eighty, temperature normal, and bowels responsive to purgatives. He was free from pain, and tympany not great. Dr. Beebe, who is present, saw this case with me late at night. The reassuring absence of symptoms, his advanced age, late hour of night, absence of facilities for operating, and the misleading opiate caused the delay. Eighteen hours later I opened the abdomen, and evacuated a large quantity of pus, which was free in the peritoneal cavity. Timely operation would probably have saved this life. Two other cases of similiar history and sad termination have I seen in the last year.

Another case. A little girl, aged eight. I saw her at noon. Fever, general abdominal distress, and constipation. The conventional purgative was given with great confidence. On the night of that day I opened her abdomen and removed a large perforated appendix. The operation was done in the presence of a fatal fulminant peritonitis. Is such a course of treatment not advocated by the gentlemen who teach the propriety and reliability of medical treatment, and that we should wait? Was not that child's life sacrificed to a mistaken pathology, and delayed intervention of surgery? Bear with me while I give you another result of delay.

A medical friend called me up a few days ago to say he had a case of appendicitis. My advice was, operate at once. Two days later I cut open a large appendical abscess. The appendix was as large as my finger; it was a part of the abscess wall, and I did not dare to disturb it. It sloughed away through the ample incision. Think of the imminent and constant peril to life, the severe

illness and protracted convalescence. During the last year I have seen several such cases.

Multiplied and disastrous experiences have driven me to the most positive distrust of all medical means of treatment. The recorded experiences and teachings of some of the ablest men in our profession demonstrate to us beyond reasonable doubt that surgery furnishes us with the proper and the best resources in dealing with this very dangerous disease. More advanced surgeons, or more heroic if you please, advocate operating in any case. It is our views and experiences, enlightened and sustained by those of others, that we are supposed to offer upon such occasions as this. It is not hoped that our views will be accepted by everyone; but the experience of every honest and intelligent observer must be recognized as part of the great integral experience which crystallizes into principle and law. For myself, I wish to say that there is not a drug known which is reliable in the medical treatment of appendicitis, and that those in popular use are frequently more harmful than useful, and that the therapy is not consistent with recognized pathology. Out of merciful consideration, we will not allude to the poultice and massage treatment. Salines and other purgatives, and enemata are admissible only as a preparation for laparotomy, and that in the early stage, estimated not by hours of time, but by the probable condition of the diseased organ. The possibility of evacuating the engorged, and probably strangulated, appendix by exciting peristalsis in the neighboring portions of intestine is not to be entertained; but this peristalsis must account for many cases of leakage; and, in later stages, breaking down of protective barriers. Why advise a man to take a saline and go to bed to rest his appendix? In other parts of the intestinal tract salines do deplete and do evacuate; but here they tend to defeat these objects. Opium, the greatest remedy known, is here powerless to do good; and potential for harm, by masking completely the progress of the disease; depriving us of danger signals whilst the most deadly conditions are developing.

Whilst it is true that many cases of appendicitis recover without operation, it is also true that the mortality could be greatly reduced by immediate operation in every case—an aseptic operation, done by a competent surgeon. The immediate operation involves but little more danger than an exploratory incision, which is comparatively insignificant. Fulminant cases, which would probably die after operation, are the cases in which death would be inevitable without operation. The mild cases, from which spontaneous recovery may with some confidence be expected, are the cases involving the least operative danger, and without operation recurrence must be a constant dread. With the limitations previously alluded to, operate immediately on making a diagnosis of appendicitis. If in doubt, operate. Operate aseptically, rapidly, and through ample incision. Do not expose the intestines to rough handling or chilling. Terrace the abdominal wound, and 90 per cent. will recover, and hernia will be unknown. If called later, when nature has guarded the patient, through the perilous stages, and an extra-peritoneal abscess confronts us—we evacuate it through a large incision, we monkey but little with the appendix—pack with gauze, and all such cases recover. If called still later, when perforation has occurred, or the abscess has opened into the peritoneal cavity, open abdomen quickly without general anesthesia if possible, irrigate with hot water and drain. Nearly all such cases die.

129 West Second Street.

OPERATION ON THE LEFT LATERAL VENTRICLE FOR THE RELIEF OF CHRONIC HYDROCEPHALUS.*

BY J. J. STILL, M.D., LOS ANGELES, CAL.

Roy W., æt. 11 years, a native of Kansas, first came under my notice during an attack of gastro-enteritis, followed by marked symptoms of acute hydrocephalus, which was probably congenital in its origin. There was considerable effusion of serum into the ventricles of the brain, resulting in serious injury to the intellectual, motor and sensory nerve centers. During the succeeding years, there was no improvement following the results of this pathological condition. He was unable to walk, talk or stand, and the state of his mental capacity was such as to ustify the belief that no improvement could be reasonably anticipated.

The necessary procedures for his admission to the Glenn Ellen Asylum had been obtained; but the epileptiform convulsions which developed a few weeks previous to the time for his departure induced the parents, who brought him to me from their home in Arizona, to subject him to operative interference. These convulsions, which occurred at irregular periods of the day and night, were a source of great distress to the parents, and it was principally upon this account that they insisted upon the operation, which, with the assistance of Drs. Valla and O'Brien, was performed on Sept. 1st, 1894.

The scalp having been previously shaved and carefully disinfected, the patient was etherized without difficulty, and a semi-circular incision about three inches in length was made upon the left side of the skull, one and one-fourth inches above Reid's base line, and the same distance behind the meatus externus auditorius. The trephine was applied and a button of bone removed. The dura mater was carefully incised and a grooved director passed into the ventricle. The fact of its having penetrated at the desired point was recognized by the diminished resistance to the passage of the instrument and by the flow of serum, which escaped in considerable quantities, both at the time of the operation and especially during the period of twenty-four hours following the operation. A decalcified bone drainage tube was now introduced and carefully secured, and the usual dressings applied.

There was evidently no perceptible shock following the operation, although the patient's preliminary condition was not such as to justify absolute freedom from anxiety with reference to this possibility. The convulsions ceased immediately and did not return; but within a few days, the temperature became sub-normal, and the patient refused to take nourishment. On the fifth day the temperature fell to 95°, and death occurred on the sixth day, with indications of exhaustion.

There was no evidence of cerebral irritation or inflammation as a result of the operation. The drainage tube was absorbed, and the external wound closed without the slightest traces of suppuration.

With respect to the history of this case, it is proper to state that there were no evidences of scrofula, tuberculosis, or other cachectic conditions affecting his antecedents. It is probable that the state of hydrocephalus was congenital, the amount of fluid being imperceptible until after the debility succeeding his attack of gastro-enteritis.

In conclusion I would state that this operation has been performed several times, but the results have invariably been fatal, and this fact gives rise to the question as to whether it is justifiable or not. With respect to the acute form of the disease, we are more hopeful; and I might say that while cerebral surgery has made great advances within the last ten years, we cannot hope for much improvement in this class of cases.

Bradbury Block.

* Read before the Los Angeles County Medical Association, Oct. 4, 1895.

SELECTED.

DEPARTMENT OF MEDICINE.

UNDER THE CHARGE OF DRS. F. D. AND ROSE T. BULLARD.

DIET IN SUMMER DIARRHEA.—(*N. Y. Med. Jour.*) Wm. A. Northridge, M. D. An outline of twenty cases of diarrhea in infancy emphasizes the importance of diet. If the doctor had to choose between the two, he would rather treat his cases by diet alone, rather than with medicine alone. The quick results attained in these cases by merely stopping the "little potato," "cracker," or "regular table food" given to infants from two to nineteen months old, should make physicians more zealous in instructing mothers as to proper diet. Of course the nearer the food supply is brought to the standard—the mother's milk—the less danger of intestinal disturbance. Practically, home sterilization of modified cow's milk, meets the indications. Table food must be absolutely prohibited during the hot weather if the child younger than two years is to be kept well.

THE TREATMENT OF DIABETES MELLITUS BY URANIUM NITRATE.—(*Brit. Med. Jour.*, Aug. 24.) Dr. Samuel West reports in detail the treatment of two cases. "These cases taken with others," he says, "point to the conclusion that we have in uranium nitrate a drug which has a powerful effect upon diabetes." That the effect is clearly due to the drug is shown by the fact that when dieting and ordinary treatment have produced all the improvement possible, still further improvement follows the administration of the drug. He has used two salts, the nitrate and the double chloride of uranium and quinine, and sees no difference in their action. It is best given freely diluted with water and after food, commencing with a small dose of one or two grains twice daily after the chief meals and increasing slowly at intervals of a few days until its effect is produced. He has given ten, fifteen and twenty grains three times a day without irritation of stomach or bowels; at the same time he thinks it possible that when the patient has once come under the influence of the drug, a reduced dose may be sufficient to keep its action up.

NITROGLYCERIN IN SCIATICA.—(*La Med. Moderne.*) Mikhalkine reports three cases of obstinate sciatica which were greatly benefited by nitroglycerin in one-drop dose of the official solution, three times a day.

SCORBUTIC MANIFESTATIONS IN THE YOUNG.—(*The Medical Age.*) By J. C. Wise, M.D., U. S. Navy. A most interesting feature is the close resemblance of this disease—as seen in the young—to rachitis, and there can be no doubt that many cases have been so considered and treated erroneously. The clinical history of these maladies can be paralleled, and until recent years German writers have insisted that "infantile scrobutus" was acute rickets. What made the view more plausible was the fact that the scorbutic condition is so often engrafted on rachitic stock, and the same decided bone symptoms and pseudo-paralysis exist in other diseases.

* * * * * * * * * *

Scorbutus attacks infants as a rule, before the end of the first year. There is no great loss of flesh but pallor is extreme, marked by muddiness of the skin; later the patient, before mentally active, becomes apathetic or irritable; muscular activity ceases; the lower limbs become flexed, and efforts to extend them provoke piteous cries of pain. Swelling of the limbs, usually symmetrical, soon follows. * * When the child is held in the lap, the limbs hang in a helpless

fashion, very suggestive of paralysis. Instead of sitting, it reclines and no longer uses the lower limbs, although previously able to walk. There is intense irritability and pain of the affected parts, due doubtless to two causes—pressure on the nerves, and anemia. * * If dentition is in progress, it is delayed, or the teeth are black and corrugated when they appear. The gums are very vascular and bleed easily; soon sponginess is marked and fleshy growths protrude about the erupting teeth. The appetite is good—an effort apparently to make up in quantity what is lacking in quality. Diarrhea does not exist. The urine is diminished. The temperature is elevated from one to two-and-a-half degrees and has slight diurnal variations. A prominent symptom is sweating of the head, just as in rachitis. * * *

The conditions under which scorbutus and rachitis arise are instructive. From time immemorial, rachitis has been looked upon as a disease of the poor, the illy fed, clad and housed. Scorbutus in the young, on the other hand, is found rather in the homes of the affluent, due in great measure to the extensive use, among the better classes, of proprietary foods, which are beyond the reach of the poor. * * * While it has been observed in children at the breast, these cases are reported from abroad, where the dietary of the lower classes is often deficient.

To those who doubt the differentiation of the two diseases, treatment may assume the character of a control experiment. If, in a case of scorbutus which has been treated as rachitis, we dispense with the chalybeate and lime syrups and use pure cow's milk, sparingly diluted with lime-water and scalded (this much we must concede to sterilization); if we permit some article of the much abused starch group in the dietary, preferably baked potato, finely sieved; and last but not least if we allow orange-juice *ad libitum*, a change most gratifying will be at once manifested. In the writer's cases it has been the most complete he has ever known in medicine. As to cod-liver oil, it may or may not be super-added; a good criterion will be to watch the bowels in reference to its assimilation; as a rule it is unnecessary.

(I have had a case recently which confirms this report; a child of eight months had gradually become less active, limbs sensitive and not moved voluntarily although power of motion was present; didn't want to sit up; there was profuse sweating of the head. The child was taking a good quantity of one of the proprietory foods; I had tried before to have milk used with the food but parents were sure, after trial, that it did not agree, so that, at this time cod-liver oil, etc., was given, and local means used for temporary relief of pain. This was persisted in for about a month without improvement when I noticed marked lividity and swelling of gums. Medicine was discontinued, the artificial food replaced by cow's milk with a little lime water, a teaspoonful of orange-juice was given three times a day and in three days the child seemed well; would play, sit up, move its legs, etc. As is stated above the change was the most gratifying and complete that I had ever seen in medicine. R. T. B.)

POROUS CLOTHING.—(*Editorial in The Sanitarian.*) It is absolutely essential to health that the emanations from the skin pass easily through the clothing. This—which is called "transpiration"—may be interfered with by an excess of clothing, or by clothing of a very close texture. All who wear india-rubber coats know how uncomfortable they are after they have been on a short time. Ordinarily proper clothing will not prevent transpiration, but an excess will interfere with it; and where too much clothing is worn it soon becomes foul, because the outside air cannot freely mingle with the gases from the body and dilute them. Some wear the thickest and heaviest undervests which they can buy, and such

people are very generally the victims of frequent colds. Following the rule of light clothing, they would be much safer from the dangers of exposure were they to wear two light undervests instead of one very thick and heavy.

PSEUDO-CHANCRE. (*New York Medical Journal*, September 28th, 1895,) by William S. Gottheil, M.D.

Reinfection syphilitica does occur, though the cases that are entirely trustworthy are very few indeed. Analysis shows that most of the alleged cases are open to grave doubt, whilst some of them are manifest errors of diagnosis. The following lesions may simulate chancre:

a. Artificial indurations caused by irritants applied to simple lesions. *b.* Nodular lymphangites, as occur in gonorrhea. *c.* Scabies, where penile lesions are the rule. *d.* Secondary indurations at the site of the initial lesion (Fournier's pseudo-chancre.) *e.* Secondary syphilitic papules or tubercles situated on the genitals. *f.* Ulcerative gummata of the genitals. *g.* Epitheliomata of the genitals.

Two such cases have recently come under the author's observation. In the first one a non-specific sore was irritated with cauterisants until it exactly resembled an initial lesion with central ulceration, and was so diagnosticated by competent authorities. Nevertheless it healed up under local treatment alone, and until now, two years after date, no secondary symptoms have appeared.

The other case was one of gumma of the penis in a subject in the tertiary stage of syphilis. The lesion resembled an initial one very closely, and was at first regarded as such; but a close examination showed the presence of evidence of past specific disease, and this was confirmed by the history. The entire lesion melted away under the iodide of potash.

Conclusions:

1. There is no characteristic sign, and no characteristic combination of signs, that enables us to diagnosticate a chancre from the lesion alone.

2. Only the advent of other syphilitic symptoms enables us to form an opinion as to the presence of syphilitic infection.

3. Almost all the alleged cases of syphilitic re-infection are of doubtful validity, and most of them are pseudo-chancres belonging to one or the other of the above classes.

SANITARIUMS FOR CONSUMPTIVES. (*New York Medical Journal*, Oct. 12th.) By S. A. Knopf, M.D. Los Angeles being a health resort, the following selection with reference to *health resorts* merits due consideration. "In health resorts, no matter how beautiful the climate, if the patients are at liberty to do as they please, I affirm that all attempts at an effective cure are an illusion. In the great health resorts of the Riviera I have seen any number of consumptives promenading in the close, dusty air of the casinos, gambling, smoking, expectorating anywhere. At the *table d'hote* they usually eat little, or what is not good for them. Now and then they see a doctor, whose directions they carry out only so far as they do not incommode them. Sometimes they do not go to see a doctor, but have some of the countless prescriptions filled of which they have brought a supply from home. After a while, feeling no better, they leave, disgusted with the climate that has done them no good, and blaming the doctor who has sent them there. In the next resort, the same thing is repeated; or they go to the mountains for a change. In some cases by the change of climate and outdoor life they really get better. They will then feel themselves privileged to make long excursions, climb mountains, or in winter skate, ride toboggans, or race on snowshoes. How dangerous such sports are for phthisical patients, even

on the road to recovery is too well-known to need repeating here. I am sorry to say that in our American resorts one too often sees the same spectacle.

I always had the conviction that these visitors, so careless with their expectoration, while often bringing wealth to such a locality, would also disseminate the germs of their disease. Curious to know if tuberculosis had really increased among the native inhabitants of these places since consumptive visitors had begun to throng there, I addressed letters of inquiry to the proper officials. Of the various answers, I will quote as a sample from a letter written by the distinguished Dr. Balestre, medical director of the hygienic service of Nice. "It is of public notoriety," he wrote, "that Nice, and especially Mentone, have seen the number of their tuberculous patients increase in an enormous proportion since consumptives have frequented these resorts."

Bennett, of Mentone, had already observed this fact some twenty years before, but he explained it by the tendency of peasants to come to the hotels to serve consumptive visitors, thus enriching themselves more rapidly at the expense of their health. In this Bennett was certainly mistaken, for it is not dangerous to live with a tuberculous patient if proper care is taken of the expectoration. The breath of a consumptive is no more poisonous than that of a well man, and never contains any bacilli.

In marked contrast to these typical reports, come the statistics from Goerbersdorf. There is situated, besides two others, the oldest and largest sanitarium for consumptives, and the nurses and servants are taken almost exclusively from the native population. Nevertheless the mortality from tuberculosis has *diminished* since the establishment of these institutions. To uphold this statement, I reproduce the official statistics of the village of Goerbersdorf for a hundred years. Deaths from phthisis pulmonalis.

1790–1799	14	1840–1849	6
1800–1809	5	1850–1859	7
1810–1819	9	1860–1869	4
1820–1829	9	1879–1879	5
1830–1839	8	1880–1889	5

But these statistics become still more interesting when one considers that the population of this village has doubled in the last twenty-five years.

During his many years of service in Brompton Hospital, London, Dr. Williams had not seen more than three or four cases among nurses or doctors where it seemed evident that pulmonary phthisis had been contracted, and this rarity led him to disbelieve the contagious nature of the disease. On my visit to Brompton Hospital, I very soon realized the true cause. The scrupulous neatness, the excellent hygienic condition, and the thorough precaution against infection from the expectoration make it almost impossible to contract the disease in that excellent institution.

In the presence of such facts no one will dare to say that the accumulation of consumptives in a well-regulated sanitarium is dangerous to the population of the district; on the contrary, the sanitarium is a place where the well are safe from all contagion.

The municipal governments of health resorts everywhere should realize the danger they are in, and enforce stricter hygienic laws and regulations in regard to their sick visitors.

And if there did exist a health resort where the hygienic conditions were perfect, should we send our consumptives there? Yes, we should send those predisposed to the disease and those who are only relatively cured, who have no more bacilli, but still feel some of their old troubles and who have learned to be

prudent. For them and from them there is nothing to fear. But for tuberculous patients whose disease is in full evolution, I repeat, with all conviction, the sanitarium is the best, the only place."

DEPARTMENT OF SURGERY.

UNDER THE CHARGE OF JOS. KURTZ, M. D., PROFESSOR OF CLINICAL SURGERY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA, AND CARL KURTZ, M. D.

THE TREATMENT OF TUBERCULOUS DISEASE OF THE HIP-JOINT. (*Allgemeine Medicin.*) In a paper read before the Congress of the German Surgical Association, Prof. von Bruns detailed the results of an analysis of the cases of coxitis observed during the last forty years at the surgical clinic of Tubingen. He excluded all cases in which no accurate history was at hand, and those occuring during the last three years. On the ground of a careful study of the remaining 390 cases, he presented the following important conclusions: 1. Tuberculous coxitis attacks almost exclusively youthful individuals; one-half of the cases occur during the first decade, one-third during the second. 2. One-third of all coxitis cases run their course without suppuration; in two-thirds abscesses and fistulæ are formed. 3. Of the patients treated by conservative methods 53 per cent. got well after an average duration of the disease of four years. 4. In 40 per cent. of the cases treated conservatively, death occured on an average in three years from tuberculous affections of other organs, especially the lungs, meninges, and in consequence of general miliary tuberculosis. Death from amyloid degeneration of the abdominal viscera after protracted suppuration is much more infrequent. 5. The prognosis is greatly influenced by the absence or occurrence of suppuration. Of the former cases 72 per cent. were cured, of the latter only 22 per cent. 6. The age of the patient is also of great significance in the prognosis, which becomes worse with increasing age. A large proportion of those cured die subsequently from tuberculosis, viz: 6 per cent., during the first decade, 2.9 per cent. during the second decade, and 7 to 14 per cent. during the period from twenty to forty years. As regards functional results, few of the patients deserved the epithet of cripples. Shortening was partially due to disturbance of growth, amounting on the average to 2 cm., and partially to elevation of the pelvis on the diseased side. Both together amounted on the average to 7 cm. The results of resection are impaired by the circumstance that two-thirds of all cases of death from coxitis are attributable to tuberculosis of other organs.

TREATMENT OF STRICTURE OF THE URETHRA. (*Med. News.*.) Dr. Orville Horwitz says that generally, dilatation is the usual and safest method of treatment. A small-sized bougie should be tried first, in order to avoid causing abrasion or laceration of the mucous lining; the size of the instrument may be increased as the pain and bleeding diminish. The instrument should be introduced once in three days, and should be sterilized and anointed with an antiseptic ointment containing oil of eucalyptus. This is the safer method in diabetes and advanced renal disease. The death rate of internal urethrotomy is two per cent., while dilatation is never followed by death. In *continuous* dilatation a small filiform bougie should be used and allowed to remain three days. Enough dilatation will then have been accomplished to proceed with some other method. This plan is of service in cases of small stricture in the membranous portion of the urethra, or in cases in which the stricture at any point is very tight. A preliminary injection of carbolized oil is a valuable procedure.

THE ABORTIVE TREATMENT OF GONORRHŒA. (*Pest. Chirurg.*

Presse, Internat. Jour. of Surgery.) In thirteen cases of incipient gonorrhœa, with only slight sero-mucous secretion, Dr. Feleki was able to effect a cure on the average in nine days by the following treatment: After the patient has urinated, an endoscope of as large a calibre as possible is introduced into the urethra somewhat beyond the limits of the affected mucous membrane, and then the parts are brushed by means of a cotton swab with a five per cent. solution of silver nitrate, care being taken that the solution gets between the folds of mucous membrane. The application must be made under guidance of the eyes. The pains produced are slight and do not last more than ten to fifteen minutes, so that previous cocainization is not necessary. The immediate effects of the procedure are pain in urination for one or two days, then diminution of the secretion, which does not usually become purulent, and subsidence of the inflammation. Salol is prescribed internally, but injections are rarely resorted to. If the secretion is scanty one application is sufficient; otherwise it is repeated after two or three days in a milder manner. In but two cases was a third application requisite. The gonococci usually present at the initiation of treatment generally disappeared a few days after the application. This treatment, however, should be employed only in cases characterized by slight inflammatory appearances.

THE PRINCIPLES IN THE TREATMENT OF PROLAPSUS UTERI. (*Berlin Klin Wochenschift, Internat. Jour. of Surgery.*) Dr. Küstner states that the treatment of uterine prolapse should vary according to the character of the affection. He distinguishos four varieties of prolapse: 1. Isolated prolapse of a portion of the posterior vaginal wall. 2. Isolated prolapse of a portion of the anterior vaginal wall, with the uterus in a normal or reflexed position. 3. Prolapse of the uterus. Prolapse of the posterior vaginal wall is usually due to laceration of the perineum and requires a plastic operation. If the wall is hypertrophied resection of a portion of the vaginal septum is indicated. Prolapse of the anterior vaginal wall may also result from rupture of the perineum. In the slighter degree the uterus preserves its normal position. The treatment consists in closing the perineal defect, and in colporrhaphy anterior if there is associated hypertrophy of the anterior vaginal wall. In cases of prolapse of the anterior vaginal wall with retroflexion of the uterus, all that is necessary is to return the organ to its normal position and keep it in place with a properly fitting pessary. If the case is complicated with a marked endometritis the uterus should be previously curetted. If a large perineal rupture exists it is advisable to combine perineorrhaphy with Mackenrodt's operation (vaginofixatio corporis uteri), so as to remedy at the same time the retroflexion. If considerable hypertrophy of the anterior vaginal wall exists, resection is, besides, indicated. Prolapse of the uterus is usually associated with retroflexion. In the milder cases of this kind reposition of the uterus and its fixation in a position of normal anteflexion by means of a pessary is required. In severe cases Küstner performs ventrofixation of the uterus, together with anterior and posterior colporrhaphy in one sitting.

CONSERVATIVE SURGERY OF THE OVARIES. In a paper read before the Belgian Surgical Society, Dr. Rouffart called attention to the favorable results obtained by Prof. Pozzi from ignipuncture of the ovaries in cases of diffuse, contracted, cystic oophoritis. Patients treated in this manner were completely restored to health and the cure has persisted; menstruation has become normal, and the pains have permanently disappeared. Incited by Pozzi's successes the author has performed this operation, and although three years have elapsed since its performance in one case the cure is still permanent.

UTERINE CALCULI. (*Zeitschr f. Gynakol, Internat. Jour. of Surgery.*) Dr. Thorn describes a remarkable case of this trouble occurring in the practice of his brother. The patient, fifty-five years old, had suffered from irregular hemorrhages, a fetid discharge, and violent abdominal pains. After dilatation of the cervix and introduction of the finger a calculus of the size of the fist was felt which was crushed with forceps and removed. At the site of calculus the fundus uteri appeared indurated. Exploratory curetting, however, failed to reveal any evidences of cancer. Two months later a profuse hemorrhage suddenly supervened, and digital examination of the uterine cavity revealed the presence of a crater-shaped ulcer at the fundus. As the scraped-off particles of mucous membrane proved to be cancerous, total vaginal extirpation of the uterus was performed with success. On examination of the literature the author found records of thirty-eight cases, the oldest dating from the time of Hippocrates. In one of the cases reported thirty-two calculi, the smallest of the size of an almond, were present in the uterus. As regards structure they consist of carbonate and phosphate of lime. In Thorn's case the lime salts were imbedded in a meshwork of muscular and connective tissue bands. He believes these calculi may originate in placental or fetal remains, but most frequently result from submucous myomata which have undergone calcification in consequence of circulatory and nutritive disturbances incidental to old age. The symptoms are analogous to those of myomata, and the treatment consists in removal of the stone with forceps, or in case it is intimately adherent to the uterus, in hysterectomy.

EYE, EAR, NOSE AND THROAT.

UNDER THE DIRECTION OF W. D. BABCOCK, A.M., M.D., PROFESSOR OF DISEASES OF THE NOSE AND THROAT, COLLEGE OF MEDICINE OF THE UNIVERSITY OF SOUTHERN CALIFORNIA.

STYE AND CHALAZION.—(*Phila. Polyclinic*, Oct. '95., Risley.) The ordinary stye is a purulent inflammation of Zeiss's gland at the root of a cilium, while an acute chalazion is the suppuration of a Meibomian gland situated in the substance of the tarsal cartilage. The stye is likely to undergo spontaneous rupture, discharge its contents and recover. The treatment for chalazion is incision preferably through the skin of the lid. The sac is dissected out, the cut sutured and a pressure bandage firmly applied for twenty-four hours.

PNEUMATIC MASSAGE BY FINGER TIPS IN CATARRHAL DEAFNESS.—(*Phila. Polyclinic*, Sept., '95, Randall.) For ten years the doctor has been convinced of its value in cases of catarrhal deafness. "I teach the patient to place the palmar surface of the finger, (the middle finger is best) upon the tragus' reaching so far back that when the tragus is drawn strongly forward the finger can just be slipped into the meatus without having the nail scratch the back margin. * * Giving the finger only such play as does not lose the closure of the meatus, the patient can easily exercise decided alternations of pressure and suction, the latter especially."

VACCINATION IN WHOOPING COUGH.—(*Gazz. d Osped.* June.) Cavalieri reports that in 1894 he had more than 200 cases of pertussis under treatment. * * He tried other methods of treatment with poor results, then resorted to vaccination. He vaccinated more than 100 children—only 64 "took." Of the 64 only one, a baby four months old, died, whereas before the vaccine was used there had been many deaths. * * The vaccinated cases recovered in from three to three and a half weeks, the unvaccinated either died within the same period or took eight or nine weeks to recover.

LARYNGEAL PHTHISIS TREATED WITH PAQUIN'S SERUM.—(*N. Y. Med. Jour.*, Oct., '95.) Loeb of St. Louis reports the treatment of eight cases of laryngeal tuberculosis with Paquin's serum with good results.

OLEO-CREOSOTE AND CREOSOTE CARBONATE.—(*N. Y. Med. Jour.*, Oct. '95.) Messinger recommends the use of oleo-creosote in bronchitis and the creosote carbonate in tuberculosis.

MASSAGE OF EAR, NOSE AND THROAT.—(*N. Y. Med. Jour.*, Sept., '95.) Freudenthal again emphasizes the effect of electro-massage in diseases of the ear, nose and throat.

OBSTETRICS AND GYNECOLOGY.

UNDER THE CHARGE OF WALTER LINDLEY, M D, PROFESSOR OF GYNECOLOGY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA.

UTERINE HEMORRHAGES are usually treated by the internal administration of ergot, hydrastis, eucalyptus, cinnamon, or a combination of these. When these do not control the hemorrhages, Dr. Talley has been using with excellent results *atropin sulphate* (gr. $\frac{1}{100}$) repeated with sufficient frequency to cause dryness of the throat. In private cases the administration of the drug is preferably by hypodermatic injection. The result is so rapid and permanent that it is used almost in a routine manner in the gynecologic clinic.—*Phila. Polyclinic.*

A FEW POINTS IN OBSTETRICS.—No branch of a physician's practice requires more self-poise, where so many complications arise, commanding our sympathy and demanding our skill, than that of obstetrics, and when disease and death follow a normal case of labor, the cause can be traced to none other than to ignorance or mismanagement.—*Med. Rev.*

With these preliminary remarks, Ewing advances a few aphorisms relating to obstetrics.

1. Examine the urine a week or so before the expected confinement. Albumin need not cause alarm, unless present in large quantity, in which case the woman should be restricted to milk diet, given one-tenth grain of sulphate sparteine four times a day, and bowels kept open with cream of tartar, the object being of course to relieve congestion of the renal veins.

2. Make no digital examination without first cleansing the hands and nails, together with the external genitals, with a solution of bichloride of mercury (1 to 2,000) and ethereal soap.

3. Empty the rectum thoroughly with an injection of warm water.

4. Make as few examinations as possible during the progress of labor, and each time dip the hand first in the antiseptic solution.

5. If the presenting part emerges slowly from the womb, do not allow your impatience to so get the better of your judgment as to induce you to "assist nature" by pulling on the os. Probably all the deep pathological tears, calling for surgical interference, found on the right and upper anterior sides of the cervix, are caused by the finger of the accoucheur.—*Medical and Surgical Reporter.*

RACHITIC INFANTS—The complete closure of the fontanelles rarely occurs before the tenth to the twelfth month, and usually in normal children in the course of the second year, though it was found in 20 per cent. in the thirteenth to fifteenth month, and in 75 per cent. in the nineteenth to twenty-first. The variations in the size of the anterior fontanelles, in perfectly normal children of the same age, are, in the opinion of the writer, merely natural differences in the

growth of the skull. Fontanelle measurements in 786 rachitic children showed: 1, the anterior fontanelle was decidedly larger than in normal children (up to 14.8 qcm. 2.294 sq. in.); 2, it does not diminish constantly from birth, but increases gradually up to the ninth month, becomes smaller in the three succeeding months, yet it does not reach its original size, and only after the beginning of the second year is a constant diminution to be observed. Yet even in the second and third years anterior fontanelles are found, measuring 25 qcm. (3,876 sq. in.); 3, the closure of the anterior fontanelle is delayed until well into the third year.—*Centralbl. f ur Gyn..; Journal Amer. Med. Ass'n.*

INFANT FEEDING.—Dr. J. H. Kellogg concludes as follows an article in *Modern Medicine* on "Milk Bacteria."

As regards reforms necessary to secure protection against the microbes of milk, the writer suggested the following:

"1. That all milking be carried on in the open air, the animals and operators standing on a material which is capable of being thoroughly washed, such as a floor of concrete or cement. Such a floor could be easily laid down in any convenient place which can be found. The site chosen should be removed from inhabited parts as far as possible, and should be provided with a plentiful water supply. Only in this way does it seem possible to avoid the initial contamination with the colon bacillus.

"2. That greater care be expended on the personal cleanliness of the cows. The only too familiar picture of the animal's hindquarters, flanks and side being thickly plastered with mud and feces is one that should be common no longer. It would not be difficult to carry out this change; indeed, in the better managed of our large dairy companies' farms such a condition no longer prevails, but in the smaller farms it is but too frequently met with.

"3. That the hands of the milker be thoroughly washed before the operation of milking is commenced, and that after once being washed they be not again employed in handling the cow otherwise than in the necessary operation of milking. Any such handling should be succeeded by another washing in fresh water before again commencing to milk.

"4. That all milk venders' shops should be kept far cleaner than is often the case at present. That all milk retailing shops should be compelled to provide proper storage accommodation, and that the counters, etc., should be tiled."

It is not probable that these painstaking precautions will be carried out to any extent, at least in connection with public milk supplies, for many years to come, consequently we must manage to get along the best we can with our germ-infected milk, and must adopt, as a measure of precaution, the uniform practice of sterilizing the milk, either by Pasteurization, heating it to a temperature of 160° F. from fifteen to thirty minutes, or by boiling for the same length of time.

NERVOUS AND MENTAL DISEASES.

UNDER THE CHARGE OF H G. BRAINERD, A.B., M D., PROFESSOR OF MENTAL AND NERVOUS DISEASES, COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA.

GENERAL PARALYSIS IN CHILDREN FROM HEREDITARY SYPHILIS. —(*Gazette des Lapitaux*, Journal of Nervous and Mental Disease.) M. Fournier, in a report on a paper by M. Régis, relative to two cases of general juvenile paralysis from hereditary syphilis, comes to the conclusion that the diagnosis of general paralysis admitted of no doubts; also that the hereditary syphilitic origin was equally certain. That these two facts went to support a relatively great number

of analogous facts, made it certain that general juvenile paralysis is most always the result of hereditary syphilis (or sometimes acquired at a young age) just as the general paralysis of adults proceeds, in the great majority of cases, from acquired syphilis. In thirty-seven cases of general infantile paralysis, syphilitic antecedents were certain in twenty-nine, and in eight they were probable. It is proper to add that in the two cases of M. Régis, the fathers of the patients were in a condition bordering on general paralysis, a condition which has been observed in several instances of general infantile paralysis.

A CONSTANT SIGN IN INCIPIENT MENINGITIS.—(*La France Med. Jour. Nerv. and Ment. Dis.*.) Simon, in his *Clinique*, called attention recently to the fact that tubercular meningitis always presented a symptom during the onset, the importance of which he considered indisputable. The sign is a disharmony, viz., an irregularity (dissociation) of the respiratory movements of the diaphragm and thorax, which sets in during the first days of meningitis, and which can be of great assistance in detecting it, even in the most atypical and insidious cases.

TAPPING THE VERTEBRAL CANAL.—(*N. Y. Med. Jour.*) Augustus Caille. This operation, performed for the purpose of diagnosis, was first suggested by Quincke at a meeting of the German Medical Congress in 1891, but has apparently received no attention in this country. There is an open communication between the subarachnoid space surrounding the spinal cord and ventricles of the brain. The puncture is made between third and fourth or the fourth and fifth lumbar vertebræ. The terminal cone of the cord is situated at the level of the first lumbar vertebra, and if a puncture is made below this point it is not likely that any of the divergent strands of the cauda equina will be injured. In semi-comatose children and in adults, narcosis is not required, and aspiration is not necessary, because the liquor cerebro-spinalis will ooze out. Quincke first tapped in order to relieve pressure symptoms in acute hydrocephalus, and recommended the procedure as a means of distinguishing between serous, purulent and tubercular meningitis.

The procedure is as follows: After locating the third or fourth lumbar vertebra, place the middle finger of the left hand upon the spinous process of the third and the index finger on the spinous process of the fourth lumbar vertebra, pressing firmly upon the bone. Now mark with the nail of the right index finger the interspace between the two fixed points, and puncture in the median line with a large-sized hypodermic needle attached to its syringe, which is merely used as a handle and not for the purpose of aspirating. No undue force should be used in propelling the needle forward; it readily enters the spinal canal, and can be moved about freely if it is in the right place. The syringe may now be unscrewed from the needle, which remains *in situ*, and permits the fluid to escape into a sterilized bottle for subsequent examination. It may safely be employed to relieve pressure symptoms in various forms of disease. In chronic hydrocephalus it is a safer procedure than tapping the cranium. For diagnostic purposes, the value of this procedure is firmly established. In two of the author's cases, tubercle bacilli were found sparingly in the flaky sediment of the liquor cerebro-spinalis.

PIANO PLAYING AND NEUROSES. (*New York Medical Times.*) A corresponding member of the Paris Academy of Medicine has sent that body a memoir in which he maintains that the numerous cases of chlorosis, neuroses, and neurasthenia observed among young girls is due to learning to play on the piano and the hours devoted to practicing. He has drawn up statistics from which he concludes that, among 6000 pupils obliged before attaining the age of twelve to learn to play the piano, nearly 12 per cent. suffer from nervous troubles.

SHOULD INSANE CRIMINALS BE EXECUTED? (Editorial in *Medical Age.*) Doctor Daremberg, the well known French practitioner and philanthropist, insists that it is folly to preserve the lives of insane criminals; such philanthropy, he holds, is at best but a mistaken one, and the moment an individual becomes a menace to society, the quicker he is placed beyond all power to do harm the better—a sentiment we heartily echo. He cites the case of a copying clerk whom he knew in his youth:

"The man had been in an insane asylum because he had, without the slightest reason or provocation, killed a neighbor in cold blood. His subsequent behavior in the asylum caused the guardians to think that he had recovered from his dangerous madness, and he was liberated. One day my father entrusted this man with a valuable medical manuscript, which had been lent by the Munich library. The clerk was to copy it, and we accompanied him to his own door in the Rue St. Jacques. We had hardly left him when we heard a noise, and, upon returning, found a dead man on the pavement, and the clerk in the hands of the police. Looking for the manuscript, we found it on a stone, where the clerk had placed it before he stabbed a harmless passer-by to death. Of course he was again sent to the asylum, where, about ten years ago, he killed the director. I do not know whether he is still alive, but there can be no doubt that such people should be put out of the world."

Formerly such individuals were chained like the wild beasts they are, but the superhumanitarian principles that make a hero of the sane murderer, a martyr of the rapist, and an idol of the sodomist, have changed all this. There appears to be nothing left in the way of protection save capital punishment. As Doctor Daremberg justly remarks, "insanity is no doubt very interesting, but its phases should only be studied where it can be rendered harmless."

CORRESPONDENCE.

LICENTIATES OF THE CALIFORNIA STATE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners of the Medical Society of the State of California, held Oct. 1, 1895, the following were granted certificates to practice medicine in this State.

CEASE, HENRY WILLIAM, 4130, Snelling, Med. Dept. Vanderbilt Univ., Tenn., March 26, 1894.
EDWARDS, GEORGE KERR, 4131, Paso Robles, Med. Dept. Univ. Pennsylvania, May 6, 1892.
FLOOD, JOHN JOSEPH, 4132, San Francisco, Med. Dept. Univ. California, July 13, 1895.
HARRISON, ISAAC MARION, 4133, Los Angeles, Med. Dept. Univ. Michigan, July 1, 1880.
HAY, WM. G., 4134, San Francisco, Med. Dept. Univ. California, July 13, 1895.
HEINE, THOMPSON G., 4135, Los Angeles, Minnesota Hosp. Coll., Minn., March 16, 1888.
JULIEN, EDWARD HOOD, 4136, Yreka, Detroit Coll. of Med., Mich., May 3, 1895.
KUSER, HENRY, 4137, San Francisco, Ludwig Maximilian Univ., Bavaria, Feb. 21, 1885.
LEUSCHNER, GEO. W., 4138, San Francisco, Mich. Coll. of Med. and Surgery, Detroit, Mich. March 15, 1892
MARTIN, ROBERT SAMUEL, 4139, San Francisco, Rush Med. Coll., Ill., May 22, 1895.
MAYFIELD, REUBEN N. 4140, Denver, Colo., Long Island Coll. Hosp., N. Y., June 23, 1850.
MINER, CLARENCE J., 4141, Fresno, Med. Dept. Univ. Minnesota, June 4, 1891.
POOLE, W. E., 4142, Yreka, Med. Dept. Willamette Univ. Or., March 26, 1884.
PORTER, WILLIAM S., 4143, Oakland, Med. Dept. Univ. Pennsylvania, June 13, 1895.
TODD, WM., 4144, San Francisco, Cooper Med. Coll. Cal., Dec. 6, 1894.
WESTMORLAND, JOSEPH, 4145, Los Angeles, Royal Coll. Phys. Edinburg, Scotland, April 26, 1865, Royal Coll. Surg., England, Aug. 1, 1806, Lic. Soc. Apothecaries, England, Dec. 6, 1866.

CHAS. C. WADSWORTH, Secretary, 518 Sutter Street, San Francisco, Cal.

VIEWS AT JACKSON'S NAPA SODA SPRINGS—The Home of Napa Soda Mineral Water.

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EDITORIAL.

THE MEDICAL COLLEGE.

The Los Angeles Medical College has just begun its eleventh year, and celebrated the completion of its first decade by laying, Oct. 9th, the corner stone of its new building. It is a structure three stories high, and is ample for all present needs, having accommodations for two hundred students. It has well equipped laboratories, large dissecting rooms, four clinic rooms, three lecture halls, a commodious amphitheatre, besides rooms for study and miscellaneous purposes. The plans include also the building of a college hospital in the near future.

Every graduate, of whom there are now fifty—forty-one men and nine women—each member of the faculty and every student and friend of the college can but be pleased with the fact that the first month of '96 will find the work in the new building. The college is located on the main car line, and in that part of town which furnishes the most clinical material.

It is a matter of congratulation that the narrow quarters which furnished the struggling college its early home can now be abandoned.

They were a necessity to the life of the institution at first, for the college in its early years was a very doubtful experiment, especially just after the death of the late lamented boom. Since '91 matters have been in a much better condition. Ten years ago there were eleven matriculants, now there are fifty-six in attendance, twenty-five of whom are in the freshman class. The college started with a three years' course, it now has a full four years' graded curriculum.

The college dispensary has handled over six thousand patients a year, and the students have also had the privileges of seeing the most interesting cases at the county hospital, at which about fifteen hundred patients are yearly treated. The classes are small enough so that each individual receives particular attention from the instructor; and each student has the privilege of personally seeing and examining every patient.

The college now can fairly hold up its head among its sisters, and there is no reason why its graduates cannot be as well equipped as those from other institutions.

A QUIXOTIC ORDINANCE.

Pomona is a dry city, and some of the exceedingly "long hairs" are very paternal in their restrictions, as the following circular shows:

FORM OF PRESCRIPTION FOR LIQUOR UNDER ORDINANCE NO. 149 OF THE CITY OF POMONA.

[Insert prescription.]

The liquor specified in the above prescription is in my opinion necessary as a medicine for the use of . . . . . and is prescribed in good faith as medicine for him or her, and not with the intent to evade or aid any person to evade the provisions of ordinance No. 149 of the city of Pomona relating to the sale and prescription of intoxicating liquors. This prescription is signed this . . . . . day of . . . . . 1895.

. . . . . M. D.

Now, neither we nor the Pomona physicians have any desire to overthrow any law which the city fathers may deem necessary for the moral good of the citizens. But it seems such restrictions as these are dictatorial in the extreme, and furthermore of no practical avail in suppressing the sale of liquors. Presumably, the doctors of Pomona are fair representatives of the profession, and doctors are supposed to know when, to whom and how often to prescribe liquors, or any other poison, such as cocaine or morphine. There would be just as much reason to have them fill out a particular blank when prescribing these powerful drugs which are capable of enslaving their victims more completely than is any dipsomaniac that ever worshipped Bacchus.

That the doctors of this town sit up nights to write prescriptions for their convivial friends is hardly to be supposed, and the compelling of

respectable physicians to sign a paper that they practice medicine "in good faith," is a Quixotic procedure worthy of the wildest whiskered Kansas statesman alive.

The regulation of the liquor traffic is a very difficult question, whether prohibition, high license, low license, free rum, or the Gothenberg system is in vogue. The prevention of drunkenness is as much desired by the doctor as by any right-thinking citizen—indeed, he knows that the being a drunkard is a disease and the becoming one a sin; and in the line of preventive medicine he will do all in his power to keep people from becoming dipsomaniacs. He never will willingly debauch any one. How picayunish it is, then, to say that he must sign a paper that he prescribed this or that drug for medicinal purposes!

DOCTOR'S BILLS.

The suit at Banning, where Dr. Shibley sued R. Curler for medical services, has been decided in favor of the doctor for the full amount, $150 and interest. We are glad to know that a suit has been won without the bill being cut down by the attorneys.

On this subject, the Dean of Norwich,(Boston *Med. and Surg. Journal,*) in a sermon is reported as having said: "Nor can I be silent about the wrongs to which scores of medical men are subject. I refer to the startling contrast between the inexorable demands which society makes on them and the elasticity of the social conscience with respect to their remuneration. I have known cases where men are summoned, at all hours, and at all seasons of the year. Their bills are presented with timidity, if not anxiety and received sometimes with amazement, sometimes with indignation, and sometimes relegated to oblivion. Nor are cases unknown where the righteous demand for work done is met by calling in another practitioner, he in turn to suffer as his brother before him. * * * My plea is that every unpaid medical bill be discharged generously, gratefully, cheerfully, and that whatever account must be deferred in payment, the last to be deferred is the account of him who is the human agent who has brought us into the world, enables us to continue our work in life, and many a time lays down his own in endeavoring to baffle death."

Dr. C. L. Bard, of Ventura, has taken in Dr. Jas. Arneill, who has been practicing at Saticoy, as his assistant. Dr. Bard left October 9th, for New York, and expects to be absent about three months. The doctor has been a hard worked man for many years, and is entitled to a spell of rest and relaxation. It is his intention to avail himself of the opportunities offered by the great medical schools of the east.

EDITORIAL NOTES.

Dr. M. M. Kannon has returned from an extended eastern trip.

Dr. M. L. Moore has returned from the east after two months' absence.

Dr. W. B. Woods, of Orange, Cal., has given up his Los Angeles office.

Dr. J. A. Champion, recently of Trinidad, Col., has located at Anaheim.

Dr. and Mrs. Macomber, of Pasadena, have returned from their European trip.

Dr. G. F. G. Morgan has located in Santa Ynez for the practice of his profession.

Drs. F. A. Seymour and Barton Dozier have removed their offices to the Muskegon.

Dr. C. A. Sanborn, of Redlands, has returned home after a several weeks' visit in the east.

Dr. W. N. Wade, formerly of Santa Ynez, has entered a new field of professional work at Lompoc.

Dr. and Mrs. C. H. Whitman have been spending a few weeks in San Francisco and other northern points.

Dr. W. W. Murphy has returned to Los Angeles after a residence of several years in Oklahoma, and has taken an office in the Muskegon.

Renz and Henry, of the Pharmacal Co., Louisville, Ky., have dissolved partnership, and the firm will continue under the name of Henry Pharmacal Co.

Dr. J. M. Sudduth, of Colton, died Sept. 20, aged 75 years. He was a man of high character, and active in all that contributed to the best interests of the town.

The San Bernardino County Hospital has maintained a camp for consumptive patients in the mountains during the summer. This was a most laudable undertaking.

Dr. A. Thompson has been re-appointed for another year as physician of the San Bernardino county hospital. The doctor and his wife will reside in the hospital, the latter serving as matron.

At a recent meeting of the Trustees of Jefferson Medical College, Philadelphia, the honorary degree of LL.D. was conferred on Dr. John Collins Warren, Professor of Surgery in Harvard University.

THE next regular meeting of the Pomona Valley Medical Society will be held in Ontario in S. P. hotel parlors, on Oct. 24th. Dr. C. W. Brown will present a paper on Spiders of Southern California; Dr. T. S. Covernton will also present a paper, subject not stated. Regulars cordially invited.

C. W. BROWN, M.D., President.
H. S. GORDON, M.D., Secretary.

THE LOS NIETOS VALLEY MEDICAL SOCIETY was permanently organized at a meeting held recently in Rivera by the election of Dr. W. D. Groton, of Rivera, president, and Dr. A. E. Kellogg, of Artesia, secretary. The society will include the physicians of Whittier, Rivera, Santa Fe Springs, Downey, Norwalk and Artesia, and perhaps those of other towns besides.

AN extremely interesting paper on "Sanitariums for the Treatment and Prophylaxis of Pulmonary Phthisis," by S. A. Knopf, M.D., may be found in the *New York Medical Journals*, Oct. 5th and 12th. This paper is a synopsis of his thesis, for the degree of Doctor of Medicine at the faculty of Paris, which is published in French. Dr. Knopf is assistant physician to Prof. Dettweiler, Falkenstein Sanitarium, Taunus, Germany.

DR. LULA T. ELLIS has begun a course under Professor Crookshank in the bacteriological laboratory of King's College, London. This college was the pioneer in providing a laboratory in England to be devoted to this special branch of medical and scientific education. This department originated in 1886, and is provided with bacteriological, histological and chemical apparatus and with pathological material, and with all the fittings, instruments and accommodation necessary for the investigation of the chemistry and micro-pathology of the communicable diseases of man and the lower animals, and for the study of bacteriology in all its applications.

COLONEL ALBERT A. POPE, who has done such grand work for the national good-roads cause, writes:—

"It would be a good thing if the government would extend the good-road work in the Department of Agriculture and build the great national highways. Then, if the states would follow the example of New Jersey and Massachusetts and build state roads, leaving to towns and cities the streets, we would, in course of time, develop a system of highways not excelled by any in the world. It has got to come. Perhaps we may not see it, though I hope to. Horses have seen their best days. Electricity and bicycles have partially done away with their use, and before this century expires practical motor carriages will be in use. Then the demand will be for still better roads and good roads in all directions, and the poor old horse will be relegated to the country, where he belongs."

We Clip from *The Corpuscle*, official organ of the alumni of Rush Medical College: "On Monday *The Corpuscle* enjoyed the honor of a call from Dr. J. W. Trueworthy (class of '65), of Los Angeles, Cal. The Doctor stops in Chicago for a few days on his homeward journey from a six weeks trip in London, Paris and Ireland. He reports a delightfully interesting time, and among other things of note mentions seeing Dr. Anderson operate at St. Thomas Hospital for fissure and hemorrhoids, and also radical operation for relief of strangulated hernia. During his stay in London he also visited the London and St. James Hospitals and various other points of interest to medical men."

The Los Angeles County Medical Association held its regular meetings on Oct. 4th and 18th. At the first meeting Dr. J. J. Still presented a paper entitled: Operation on the Left Lateral Ventricle for the Relief of Chronic Hydrocephalus, (see page 378). At the second, Dr. T. J. McCoy read a paper on Myiasis Narium, reporting a case where forty-nine larvae or Texas screw-worms were removed from the naso-pharynx and soft palate (with specimens). New members received during the month are: Dr. F. E. Yoakum, Los Angeles; Dr. J. M. Armstrong, East Los Angeles; and Dr. Chas. Lee King, of Sierra Madre Sanitarium. The Association meets on the first and third Friday evenings of each month, at the Chamber of Commerce Hall.

Dr. J. P. Booth, Surgeon A. & P. R. R. writes of the meeting of the Association of Railway Surgeons at Winslow, Oct. 2nd, as follows: "Our meeting was a very interesting one and besides my little paper (see page 367) we had one by the President, Dr. Ely, of Kingman, entitled, 'Nothing Will Dissolve It,' which was the recital of an unique case of diarrhea with fever simulating typhoid, and followed by constipation, all of which were produced, according to the doctor's theory, by small particles of chewing gum, which had been swallowed and had become adherent to the walls of the intestines. The patient, a boy, had the chewing gum habit in its must disgusting form, and this was the result. Doctors Cornish and Derderian made an oral report of a case of placenta previa centralis, which was very interesting, and which elicited considerable comment from the other members. The next meeting will occur at Needles, Jan. 8th, 1896, and bids fair to prove of unusual interest, as Chief Surgeon Kaster, of Albuquerque, and several of his prominent professional friends from that city will be present."

We hope Dr. Booth will favor us with a report of the coming meeting.

THIRTY-ONE PATIENTS were admitted to the Highland asylum last month, and if the present rate of commitments are kept up much longer the institution will be as badly crowded by the time the next legislature meets as it was before the east wing was built when the hallways and odd nooks and corners were used for sleeping purposes. The late legislature appropriated $116,000 for a new ward, but the bill was vetoed by the governor. The next legislature will undoubtedly make such an appropriation, and when it does the governor should sign it. A new ward is badly needed.

PAMPHLETS RECEIVED.

PERFORATION IN ENTERIC FEVER; ITS SURGICAL TREATMENT. By FREDERICK HOLME WIGGIN, M.D., Visiting Surgeon, New York City Hospital. Reprint from Proceedings of Connecticut Medical Society.

SURGICAL CLINIC HELD AT ST. MARY'S HOSPITAL, FEB. 10, 1895. By H. O. WALKER, M.D., Detroit, Mich. Reprint from Medical Mirror, Aug., 1895.

TWO CASES OF COMPLETE BLINDNESS, CAUSED BY MALE HYSTERIA. By A. BARKAN, M.D. San Francisco.

SIX MAGNET OPERATIONS FOR THE REMOVAL OF FRAGMENTS OF IRON FROM THE EYE. By A. BARKAN, M.D. Read before State Medical Society, April, 1895, San Francisco.

THE OSTEOPATHIC FAD. By A. J. STEELE, M.D., St. Louis, Professor of Orthopedic Surgery in the Missouri Medical College and St. Louis Postgraduate School of Medicine, etc.

ANNOUNCEMENT OF KENTUCKY SCHOOL OF MEDICINE, 1895 AND 1896, FORTIETH ANNUAL SESSION, Louisville, Ky.

TREATMENT OF INEVITABLE ABORTION. By JOHN R. HAYNES, M.D., Los Angeles, Cal.

OVARIAN POLYCYST. By FRANCIS L. HAYNES, M.D., Los Angeles. Reprin from Southern California Practitioner.

ARE LIGATURE-FISTULAE AFTER CELIOTOMIES AVOIDABLE? By FRANCIS L. HAYNES, M.D. Reprint from Medical News, Nov., 1894.

ACETANALID AS AN ANTISEPTIC SURGICAL DRESSING. By WM. A. EDWARDS, M.D., San Diego, Cal. Reprint from the Southern California Practitioner, Aug., 1895.

AN ANOMALOUS FEMALE URETHRA. By WM. A. EDWARDS, M.D., San Diego, Cal. Reprint from American Gynecolog. and Obstet. Journal, April, 1895.

CIRRHOSIS OF THE LIVER IN CHILDHOOD. By WM. A. EDWARDS, M.D., San Diego, Cal. Reprint from Archives of Pediatrics, July, 1895.

A PRACTICAL LOW-PRICED DEVICE TO SECURE THE TRENDELENBURG POSTURE. By WM. A. EDWARDS, M.D. Reprint from the Univ. Med. Mag., June, 1895.

ANNUAL ANNOUNCEMENT OF THE CHICAGO PHYSIO-MEDICAL COLLEGE, 1895-1896.

THE TREATMENT OF FISTULA IN ANO BY LANGE'S METHOD OF IMMEDIATE SUTURE OF THE TRACT. By LEWIS H. ADLER, JR., M.D., Professor of Diseases of the Rectum, Philadelphia Polyclinic, etc. Reprint from Medical News, June 1, 1895.

FIRST IMPRESSION OF A MEDICAL EXAMINER. By EDWARD CRANCH, M.D., Erie, Pa. Reprint from The Homeopathic Physician, April, 1895.

DIE SYPHILITISCHE AUTOINFECTION UND DER HARTE LIDSCHANKER. VON S. HOLTH (Norwegen).

EXTIRPATION AND COLOTOMY IN CASES OF CARCINOMA OF THE RECTUM. By LEWIS H. ADLER, JR., M.D., Professor of Diseases of the Rectum, Philadelphia Polyclinic, etc. Reprint from Medical News, July 20, 1895.

NON-OPERATIVE METHODS OF TREATING ANAL FISSURE OR IRRITABLE ULCER OF THE RECTUM. By LEWIS H. ADLER, JR., M.D., Professor of Diseases of the Rectum, Philadelphia Polyclinic, etc. Reprint from Therapeutic Gazette, July 16, 1894.

THE OPERATIVE TREATMENT OF FISTULA IN ANO. By LEWIS H. ADLER, M.D., Professor of Diseases of the Rectum, Philadelphia Polyclinic, etc. Reprint from International Med. Mag., Oct., 1892.

STRABISMUS AS A SYMPTOM, ITS CAUSES AND ITS PRACTICAL MANAGEMENT. By LEARTUS CONNOR, M.D., Detroit Mich. Reprint from Jour. Amer. Med. Ass'n, June 29, 1895.

THE TECHNIQUE OF THE CAESAREAN SECTION. By A. PALMER DUDLEY, M.D., Prof. of Gynecology in the New York Post-graduate school, etc. Reprint from Amer. Jour. of Obstetries.

DAR LICHT, UNSERE GELBE SALBE UND DIE GEWÖHNLICHEN SALBENKRUKEN. VON S. HOLTH. Separat-Abdruck aus Knapp und Schweigger's Archiv fuer Augenheilkunde XXX Band. Wiesbaden, 1895.

A CLINICAL AND BACTERIOLOGICAL STUDY OF THE "GONOCOCCUS NEISSER" AS FOUND IN THE MALE URETHRA AND IN THE VULVO-VAGINAL TRACT OF CHILDREN. By HENRY HEIMAN, M.D. Reprint from New York Med. Record, June 22, 1895.

LONGEVITY OF THE TUBERCLE BACILLUS. By HENRY HEIMAN, M.D. Reprint from New York Medical Journal, March 12, 1892.

THE DIAGNOSTIC VALUE OF THE MEDICAL LABORATORY. By WM. M. HARSHA, A.B., M.D., Chicago. Lecturer on Surgery Coll. Phys. and Surg. Reprint from Medicine, May, 1895.

BOOK REVIEWS.

THE PATHOLOGY AND SURGICAL TREATMENT OF TUMORS. By N. Senn, M.D., Ph.D., LL.D., Professor of the Practice of Surgery and Clinical Surgery, Rush Medical College; Professor of Surgery, Chicago Polyclinic; Attending Surgeon to Presbyterian Hospital; Surgeon-in-Chief, St. Joseph's Hospital, Chicago. Illustrated by 515 engravings, including full-page colored plates. Sold only by subscription. Philadelphia: W. B. Saunders, 925 Walnut St. 1895. Price, $6.00, cloth; $7.00, half morocco.

The appearance of such a work from so well known an author needs no apology. Senn has, he says, been many years collecting material for this work. There are many text-books on surgery, but the departments devoted to tumors have been condensed to a degree incompatible with their importance. This same firm published, early in the year, an excellent surgical pathology by Warren, in which tumors occupied 150 pages. Here is a volume of over 700 pages devoted to the origin, nature, structure, clinical aspects and treatment of tumors.

Just as the botanist includes in the same class wholesome and poisonous plants, from their morphological resemblance, the pathologist groups together tumors which have the same embryonic origin. Accordingly, Senn's classification is as follows:

I. Epiblastic and hypoblastic tumors; papilloma, adenoma, cystoma, carcinoma.

II. Mesoblastic tumors; fibroma, lipoma, myxoma, chondroma, osteoma, angioma, lymphangioma, myoma, neuroma, sarcoma.

III. Epiblastic, hypoblastic and mesoblastic tumors; teratomata.

IV. Swellings caused by retention of physiological secretion; retention cysts

Microscopically the lowly organized tumor tissue represents malignant tumors, and tumors of highly organized cells include benign growths. He calls all tumors

either benign or malignant—one extending beyond its germinal layer of origin being malignant; if not so acting, it is benign.

The chapter on diagnosis gives minute directions as to obtaining the clinical history, the length of time tumor has existed, the location, rapidity of growth, pain, tenderness, careful examination of patient both locally and generally, the especial examination of the neoplasm as to color, size, form and structure of surface, location, transmission of light, resistance, consistence, pulsation, crepitation, auscultation, percussion, and, if possible, connection of the tumor with the mother soil.

As to the microscope in diagnosis, he says "only specimens which represent both cells and stroma in their proper relations enable the microscopist to interpret the character of the tumor." Senn concludes this chapter with the following opinion: "The microscope is an invaluable aid in the diagnosis of tumors, but the conclusions based upon the results of the examination are not infallible, hence the importance of a careful study of the clinical aspects of the tumor, followed by a thorough examination of the patient, of the tumor, and of its environments."

His definition of tumor is, "a localized increase of tissue, the product of tissue proliferation of embryonic cells of congenital or post-natal origin, produced independently of microbic causes." He thus disposes at the outset of the microbic theory, and endorses the influence of heredity on the origin of tumors. Just as supernumerary toes appear in several generations, so may benign tumors, on account of the "unconscious memory of protoplasm." Carcinoma also runs in families, there being transmitted both an embryonic matrix and a diminished physiological resistance, which allows the possibility of the formation of the tumor.

He discusses at length the origin, morphology, anatomy, pathology, clinical aspects, transformation, diagnosis and prognosis of tumors; and then describes the especial growths in detail. Carcinoma receives very extended discussion, 170 pages being devoted to these growths. Sarcoma also obtains quite lengthy consideration.

The typographical and general make-up of the work is precise and pleasing. The illustrations are of exceptional worth. It is not often the lot of a reviewer to examine a work of such sustained excellence. This is destined to become a medical classic—it will be an essential to the surgeon, it will be an authority to the advanced student and a reference work to the practicing physician. In his former Surgical Pathology of '90, Senn omitted the subject of tumors entirely; he now makes public the results of his own researches, as well as his opinions derived from the great pathologists and surgeons of our time. It is an original work—it is the work of one who has assimmilated the facts of modern research—of one who has made surgery, as far as he is concerned, both a science and an art; and that knowledge he expresses in a pleasing style and in a positive yet tolerant manner.

THE POCKET MATERIA MEDICA AND THERAPEUTICS.—A Resume of the Action and Doses of all Officinal and Non-Officinal drugs now in common use. By C. Henry Leonard, A.M., M.D., Professor of the Medical and Surgical Diseases of Women and Clinical Gynæcology in the Detroit College of Medicine; member of the American Medical Association, etc., etc. Second edition, revised and enlarged; cloth, large 16-mo., 367 pages, price, post-paid $1.00. Detroit, 1895; The Illustrated Medical Journal Co., Publishers.

The second edition of this popular therapeutic work has had 67 pages added to it, besides typographical errors corrected, etc. A new and complete cross-index has been prepared, which renders the quick finding of a non-familiar drug possible. This is an important feature lacking in many ready-reference books. It is a "down-to-date book," and this with unique arrangement of its description of

drugs and compounds secured for the first edition an order by cablegram for 1000 copies from Bailleiro, Tindall & Co., one of the largest medical publishing houses in London; a compliment rarely paid any American book. It has also been a popular book with physicians, pharmacists and students on this side of the water, judging from the early exhaustion of the first edition.

The descriptive arrangement of the drugs is as follows: Alphabetically the drug, with its pronunciation, (officinal or non-officinal standing indicated), genitive case-ending, common name, dose and metric dose. Then the English, French and German synonyms. If a plant, the part used, habitat, natural order, botanic description, with alkaloids if any; if a mineral, its chemical symbol, atomic weight, looks, taste, how found, its peculiarities. Then the action and uses of the drug or compound, its antagonists, its incompatibles, its synergists and then antidotes. Then follow its officinal and non-officinal preparations with their medium and maximum doses. Altogether it is a handy volume for physician, druggist or student, and will be frequently appealed to if in one's possession. We believe it to be the most complete and exact of any of the books of its class now issued, and its moderate price is to be commended.

MODERN MATERIA MEDICA, with Therapeutic Notes. For the use of practitioners and students of medicine. By Dr. Otto Roth. Seventh edition, Revised by Dr. Gregor Smith, Wurzburg. One volume of 467 pages, octavo, muslin binding. Price, $2.00. Wm. Wood and Company, New York, 1895.

The book opens with a classification of the various agents grouped according to their physiological and therapeutical actions; there then follows the main article of the work, some three hundred pages long, on drugs, their physiological action, therapeutic use and dosage, alphabetically arranged. Two short chapters on remedies used for subcutaneous injection and for inhalation follow. Therapeutic notes occupy 137 pages. The book closes with three short chapters on doses for an adult, doses for children, and a therapeutic index.

The book is very concise, the prescriptions practical, and the style clear. It occupies a position midway between the quiz compend and the larger materia medicas. It very rightfully combines therapeutics and materia medica, as the application of a knowledge fixes in mind the knowledge itself. The fact that the work has just completed its seventh edition speaks of itself for the popularity of the book.

NEW WORK ON CONSUMPTION—A new work under the title of "Consumption; its Nature, Causes and Prevention," over 340 pages, with illustrations, is announced, to be soon issued by William Briggs, the Toronto publisher. The prevention of this prevalent and most fatal disease is a subject of the greatest importance. Too many works on it can hardly be published. The author of this one is Edward Playter, M.D., author of Playter's "Physiology and Hygiene" (authorized for teachers), and a number of pamphlets and papers on consumption, and for twenty years editor of the Canada Health Journal. He has himself made some special investigations relating to the causes of consumption, and during a practice of over a quarter of a century given special attention to the subject. He believes, and quotes high authorities to show, that the body factor or condition—the so-called "soil"—arises directly and immediately from the decomposition of retained effete substances in the blood and tissues, the result of imperfect tissue metabolism, from a proportionately small respiratory capacity and want of oxygen; and that this factor, rather than the bacillus, should be regarded as the exciting cause of the disease, often giving virulency to the bacillus, also an essential factor. Ziemssen says, of consumptives: "The respiration is not deep enough and the

lungs are not well enough expanded;" while the "out-door" "pure air treatment," which increases the respiratory function, is universally the first and chief reliance. The author touches upon the botany of the bacillus and its possible benign character and open-air growth (Koch to the contrary notwithstanding.) He believes the disease is in a degree infectious, but that preventive measures should bear rather against the body condition as the more important and preventable cause, and quotes Sir James Clark and others in support of this. The following indicates the heads and sub-heads under which some of the preventive measures are treated: Pure air, soil, dwellings, bedrooms, respiratory exercises, sitting and lying out-doors, occupation, preventing "colds," words to parents, marrying, state measures, public instruction, drainage, better inspections, sanitaria, with chapters on climatology, and a short one on the climate of northern New York, Vermont and Canada.

A TEST IN PHARMACAL "ETHICS."—Mr. E. A. Schubert, of Fostoria, Ohio, in the course of a paper on pharmacal ethics, relates this account of a practical test of the professional integrity and competency of retail druggists in a given section of his state—a section, by the way, probably the equal in professional intelligence and honesty of the average community in Ohio and other states. "I espoused the thought," remarks Mr. Schubert, "that it would be a capital idea to write a prescription of easy composition and analysis, to see how many druggists would fill it correctly. I set to work immediately mailing to each of fifty physicians one of the prescriptions, at the same time asking him to write it as a prescription of his own, send some friend with it to his druggist to have it filled, a copy taken and returned to me with the compounded prescription. Out of the fifty requests sent out, I received thirty-seven answers. The prescription called for a three-ounce preparation, but placing them side by side I found twenty-one to be three-ounce preparations, seven were in size four ounces, while the rest ranged in size from five to eight ounces. It was to be an emulsion; nineteen were of that composition, the remainder were far from being true to name. In color, when correctly filled, it would be nearly white; of these twenty-two were true in color, while the remainder ranged from a steel gray to nearly all the known hues. The principal active ingredient was the acetate of morphine; thirteen only contained this, the remainder principally contained the sulphate. *Out of the entire number returned, eleven were found to be filled correctly.* The remainder were base substitutions, either through ignorance or intention. Of the eleven that were correct, nine came from the hands of Ph. G.'s, the remaining two were compounded by old and reliable druggists in the city. Of the twenty-six not properly filled we found five Ph. G.'s, the remainder were country druggists having very little experience in this line and located, with but few exceptions, in towns of 6,000 inhabitants and less." Can it be possible that this sort of recklessness and ignorance characterizes the profession in other intelligent communities?—*Western Druggist, August, 1895.*

I have used Phytoline in several cases of obesity and have received gratifying results. It is a remedy that the physician needs and if he will use it with that discretion that all powerful medicines ought to be used, he will not be disappointed with the results. Had a case where a prominent patient of mine, weighing 373 pounds with some cardiac and rectal trouble, was reduced with this remedy and the use of cardiac stimulants and sedatives, to 265 pounds and his general health is better than it has been for years. This speaks volumes.

Detroit, Mich. E. B. SMITH, M.D.

MONTHLY METEOROLOGICAL SUMMARY.

U. S. WEATHER BUREAU, LOS ANGELES STATION.

Los Angeles, California. *Month of September, 1895.*

Date	TEMPERATURE Max.	Min.	Mean	Precipitation in inches and hundredths
1	80	55	68	0
2	79	52	66	T
3	77	56	66	0
4	78	58	63	0
5	76	54	65	0
6	82	53	68	0
7	76	54	65	0
8	76	56	66	0
9	76	58	67	0
10	78	58	68	0
11	94	56	75	0
12	91	66	78	0
13	84	64	74	T
14	84	57	70	0
15	79	49	64	0
16	79	52	66	0
17	78	48	63	0
18	76	50	63	0
19	74	49	62	0
20	76	50	63	0
21	81	53	67	0
22	88	48	68	0
23	92	60	76	0
24	93	58	76	0
25	97	56	76	0
26	92	52	72	0
27	90	54	72	0
28	92	59	76	0
29	84	58	71	0
30	79	56	68	0
31				

SUMMARY

MONTHLY RANGE OF BAROMETER:

Mean Barometer, 29.90.
Highest barometer, 30.00, date 5.
Lowest barometer, 29.78, date 20.
Mean Temperature, 69°.
Highest temperature 97°, date 25.
Lowest temperature 48°, date 22.
Greatest daily range of temperature 41°, date 25.
Least daily range of temperature 19°, date 9.

MEAN TEMPERATURE FOR THIS MONTH IN

1876	70°	1889	73°
1877	71°	1890	71°
1878	70°	1891	73°
1879	69°	1892	68°
1880	66°	1893	66°
1881	70°	1894	69°
1882	70°	1895	69°
1883	74°		
1884	67°		
1885	71°		
1886	68°		
1887	69°		
1888	74°		

Mean temperature for this month for 17 years, 70°
Total deficiency in temp. during the month, 1°
Total deficiency in temp. since Jan. 1. 316°
Prevailing direction of wind, West.
Total movement of wind, 2377 miles.
Maximum velocity of wind, direction, and date, 14m, N. W. 12th.
Total Precipitation, Trace.
Number of days on which .01 inch or more of precipitation fell, 0.

TOTAL PRECIPITATION FOR THIS MONTH IN

1878	.00	1884	T	1890	.06
1879	.00	1885	.00	1891	.06
1880	.00	1886	.00	1892	.00
1881	T	1887	.15	1893	T
1882	T	1888	T	1894	.73
1883	.00	1889	.00	1895	T

Average precip'n for this month for 17 years, .06.
Total deficiency in precip'n during month .06 inches.
Total precip'n from Sept. 1,'95, to date, trace inches.
Average precip'n from Sept. 1,'95, to date, .06 inches.
Total deficiency from Sept. 1,'95, to date, .06 in.
Average rainfall for 10 wet seasons, 21.58 inches.
Number of clear days, 12.
" partly cloudy days, 17.
" cloudy days, 1.

NOTE—Barometer reduced to sea level. "T" indicates trace of precipitation.

METEOROLOGICAL SUMMARY SOUTHERN CAL., SEPTEMBER, 1895.

STATIONS	TEMPERATURE Mean	Max.	Min.	Mean Barometer	Relative Humidity	RAINFALL Days	Am't	WEATHER Clear	Fair	Cl'y	WIND Direction	Total Mov't
Los Angeles	69.	97.	48.	29.90	68.	0	T	12	17	1	W	2,377
San Diego	67.	90.	54.	29.90	72.	1	.01	27	2	1	N W	3,654
Santa Barbara	65.6	86.	48.		70.	0	0	23	4	3	W	2,830
Yuma	84.	107	58.	29 77	40.	0	T	23	7	0	W	4,408
Arlington Heights												
Ontario												
Pasadena												
Redlands												
San Bernardino												
Santa Ana												

OBSERVERS.—George E. Franklin, U. S. Weather Bureau, Los Angeles; M. L. Hearne, U. S. Weather Bureau, San Diego; Hugh D. Vail, Santa Barbara; A. Ashenberger, U. S. Weather Bureau, Yuma. JAMES A. BARWICK, Director California Weather Service, Sacramento, Cal.

REGISTERED MORTALITY OF LOS ANGELES.

WITH SEX AND NATIVITY OF DECEDENTS.

Estimated Population, 80,000 — *September, 1895.*

CAUSE OF DEATH	Total Deaths	Annual rate per 1000	SEX		NATIVITY				RACE		
			Male	Female	Los Angeles	Pacific Coast	Atlantic States	Foreign Born	Caucasian	African	Mongol
Deaths from all causes	82	12.30	44	38	25	14	25	18	74	6	2
Deaths under 5 years	28										
i. Specific infectious diseases	15	2.25	7	8	2	2	9	2	13	2	
ii. Diseases of digestive system	12	1.80	4	8	8	4			12		
iii. Diseases of respiratory system	12	1.80	8	4	4		4	4	9	2	1
iv. Diseases of nervous system	6	.90	4	2	1		2	3	5		1
v. Diseases of circulatory system, blood and ductless glands	3	.45	2	1	1		2		2	1	
vi. Diseases of genito-urinary organs	5	.75	2	3	1		1	3	5		
vii. Constitutional diseases	6	.90	3	3	2	1	1	2	6		
viii. Intoxication, violence, accidents	8	1.20	7	1		3	3	2	8		
ix. Miscellaneous diseases	15	2.25	7	8	6	4	3	2	14	1	
i. Septicæmia	1	.15	1		1				1		
Pyæmia											
Diphtheria											
Erysipelas	1	.15	1				1		1		
Typhus fever											
Typhoid fever	2	.30		2			2		2		
Malarial fever											
Scarlet fever											
Measles											
Cerebro-spinal meningitis	1	.15		1		1			1		
Smallpox											
Tuberculosis	8	1.20	3	5		1	5	2	8		
Influenza											
Dysentery											
Syphilis	1	.15	1				1			1	
Tetanus											
ii Diseases of the œsophagus											
Gastritis											
Enteritis											
Gastro-enteritis	3	.45	2	1	3				3		
Cholera infantum	6	.90	2	4	4	2			6		
Entero-Colitis	1	.15		1		1			1		
Appendicitis											
Intestinal obstruction	1	.15		1	1				1		
Diseases of liver											
iii. Membranous croup											
Bronchitis	3	.45	2	1	2			1	3		
Pneumonitis	1	.15	1		1				1		
Pleuritis											
Phthisis	8	1.20	5	3	1		4	3	5	2	1
iv. Diseases of brain	4	.60	3	1	1		1	2	3		1
Diseases of spinal cord	1	.15	1				1		1		
Neuritis											
Epilepsy											
v. Diseases of heart	3	.45	2	1	1		2		2	1	
Degeneration of arteries											
Aneurism											
Anæmia											
vi. Uraemia											
Cystitis	1	.15	1					1	1		
Chronic Brigh'ts disease	2	.30	1	1			1	1	2		
Nephritis	2	.30		2	1			1	2		
vii. Rheumatism											
Gout											
Diabetes	1	.15	1					1	1		
Inanition	3	.45		3	2	1			3		
Senility and Asthenia	2	.30	2				1	1	2		
viii. Alcoholism	1	.15	1				1		1		
Opium habit											
Suicide											
Violence and accidents	5	.75	4	1		3	1	1	5		
ix. Tumors—malignant	6	.90	2	4		2	2	2	6		
Tumors—non-malignant											
Other diseases	9	1.35	3	6	6	2	1		8	1	

F. W. STEDDOM, M.D., Health Officer.

OUR ADVERTISERS.

TAKA DIASTASE.

[From the Therapeutic Gazette, July 15, 1895, by Ferdinand Lascar, Ph.Gr., pathologist to the Demilt Dispensary, etc.]

In the human system a continued waste takes place which it is necessary to provide for, and to this end man partakes of food which must contain the elements for this purpose. To bring such food products into proper form, so that they can be assimilated and taken up in the system, the digestive organs perform their functions, and these are of a mechanical and chemical order. The food needed is both animal and vegetable in nature, the latter forming by far the greater and more important part. As the food man partakes of is twofold, so is the process of digestion; animal and nitrogenous foods needing an acid, while vegetable, starchy foods need an alkaline process to bring them into a soluble form ready for assimilation. The general idea about faulty digestion is that the stomach performs its duties improperly. While this, in very many instances, is undoubtedly so, the fact is, nevertheless, that in the greater number of cases of impaired digestion improperly performed processes of other organs are at the bottom of the evil in failing to properly convert the starchy food partaken of. * * *

Since medical science has thoroughly grasped the philosophy of digestion, it has been the aim by artificial means to supply the enzymes which digestion calls for, when they do not appear to be present in a sufficient quantity or are secreted in less potent form by the digestive organs. Science has succeeded fairly well in supplying gastric and pancreatic ferments when nature lags behind; but our success has so far been only a very partial one in supplying starch-converting substances, and for this reason a new and seemingly valuable discovery in this direction at once becomes interesting.

From time to time pure diastase has been offered to the profession, but none has so far proved of a sufficient potency to recommend itself to general use. Great progress in this direction is the discovery of Mr. Takamine, a chemist of no mean ability, who acted as one of the commissioners of Japan at the Cotton Exhibition in New Orleans several years ago. * * * The avoiding of all undue heat in preparing diastase may be one of the reasons why the diastase which is now manufactured by Parke, Davis & Co., under Mr. Takamine's discoveries, is so perfect in its action in converting starch into maltose and dextrose. His product is a dry powder similar in appearance to some I received from a reputable German firm years ago, but is vastly superior in potency.

In comparing notes of experiments lately conducted with taka diastase, other available diastases, and different extracts of malt, I find that the claim of the taka diastase that it will convert a hundred times its own weight of starch into a soluble state is well authenticated, for I have succeeded in converting even fifty per cent. more of starch than is claimed for it. Another point in favor of taka diastase above other similar products, is the quickness of its action upon starch, for the action is almost instantaneous. To convert one hundred parts of starch into a soluble state by the action of one part of taka diastase, under proper conditions, it takes only four minutes until neither iodine test nor the microscope can detect unconverted starch. The product of converted starch with Mr. Takamine's taka diastase is to a great extent maltose. Compared with the time required by the best extract of malt to convert starch, this is certainly an excellent showing, for it took the best malt extract between seven and eight minutes to convert its own weight of starch into a soluble state, while with some other extracts of malt it

took fifteen, twenty, and thirty minutes to partially accomplish this end. Tests with Fehling's solution to ascertain in the converted starch products the amount of contained sugar therein were equally favorable to taka diastase. * * *

Taka diastase being a dry powder, tasteless and of no perceptible odor, can be given in very small bulk, and for this reason I think it will prove itself of value in infant feeding, where it is desirable to give starch-containing foods, provided said food would easily dissolve and the infant's saliva could be relied upon to perform that function. That the new distase is destined to become a favorite with the profession, I have no doubt, having acquainted myself with its potency in converting starch in a minimum of time into a form ready for absorption by the system, and I think it will be found the very remedy for which we have waited so long.

RESPONSIBILITY FOR UNTOWARD ACTION.

With the characteristic pithy and trenchant utterance which "hews to the line letting the chips fall where they may" and which marks all of his sayings, Dr. Frank Kraft, 57 Bell Avenue, Cleveland, Ohio, Professor of Materia Medica, Cleveland Medical College, writes: "The professional market seems to be filled with substitutes for the original and ever favorite antikamnia; all warranted to do what the antikamnia has succeeded, by hard work and expenditure of much money, in establishing; all of these nefarious products masking under some name partly modeled after the antikamnia pattern, beginning with an A, and warranted to still pain, etc., etc., are base imitations of antikamnia. They may be, and perhaps are, coal tar products, but they cannot take the place of antikamnia; this was the first product and made a success because of its merit; hence the host of imitators. Insist upon getting the original antikamnia, and caution your druggist that if he practices any substitution you will not only decline further to deal with him, but hold him personally responsible for any untoward action of his substituted remedy."

THE ONE RELIABLE SPECIFIC.

Dr. William Richard Goodfellow, M. R. C. S., Roche, Cornwall, England, L. S. A. (*London Hospital, Surgeon Roche and St. Anstell United Mines*), says:

"I have used in practice the preparation known as Succus Alterans, and have much pleasure in bearing testimony to its great value. For disases having their origin in a syphilitic source, I believe Succus Alterans to be the one reliable specific, for I may add that invariable success has been met with by me when prescribing the remedy in question, even after the failure of other alteratives. I shall continue to rely on the Succus Alterans in all cases I have indicated herein. —*Medical Reprints, London.*

A PHARMACEUTICAL TRIUMPH.

There is probably no laxative or cathartic in the materia medica which is more widely known and more generally used, especially as a home remedy, than Castor Oil. Its only objection has been its taste. Now, however, even this has been removed, and we have "A Pleasant Castor Oil."

Laxol is pure castor oil sweetened with benzoic sulphinide and flavored with oil of peppermint. By referring to advertising page XXI, the readers of this journal will learn how they can procure samples and literature without expense.

Laxol is used in many of the best hospitals in the east where it has been used for some time.

THE chemical company that lies about the therapeutic properties of a product is worse than a "circulation liar." The Cod-liver Glycerine Company, of St. Louis, backs all its claims for Codliver Glycerine by offering to send to any practicing physician who has never tested it a $1.00 bottle of Codliver Glycerine if you will pay express delivery charges. This is a snap. Test it for yourself.

[Translation.] ROME, 29th Oct., 1880.

Ingluvin, the pharmaceutic product from the manufactory of Messrs. Wm. R. Warner & Co., Philadelphia, U. S. A., has proved to be of a great curative value in all diseases for which it is recommended as also in chronic affections of the uterus. *I have observed that it is a very good substitute for Pepsin.*

DR. CUOLE PASRUALI
Director of the Royal Geneacological Colliseum.

CHRONIC CYSTITIS WITH STRICTURE.

My experience with Sanmetto is quite extensive. I could give special cases in which its action was simply astonishing, but in this report I wish to summarize my experience by saying I have given Sanmetto a long and thorough trial in a case of chronic cystitis, accompanied with stricture, the result of which warrants me in saying Sanmetto is unsurpassed by any other preparation with which I am acquainted. Its effects are prompt and positive.

Buffalo, N. Y. RACHAEL J. KEMBALL, M.D.

AMERICAN medical, pharmaceutical and trade journals, usually keen to detect a hidden advertisement in communications recommending new drugs and preparations when the same emanate from home sources, throw caution and ordinary business sense to the winds when it comes to recommending and puffing the very same class of merchandise bearing a foreign name and recommended by foreign authority. One of the proprietors of a drug of this sort, recently established in America, on being approached by the solicitor of advertising for an American journal, answered very curtly that "they didn't have to advertise their article. They got all the advertising they wanted for nothing, in the shape of laudatory communications in the reading matter of the medical journals." Which was true, every word of it, and that in spite of the fact that it was a patent medicine. The very journal for which the agent was soliciting, and in the very copy which he carried as a specimen, contained no less than six laudatory notices of the drug in question—one of them a communication covering several pages, and heralding its virtues in almost every known form of disease. *Per contra*, the same journal had enjoyed for years a handsome revenue from the advertisement of a reputable proprietary medicine house of this city, but had persistently refused to admit within its reading matter a little notice commendatory of one of its specialties, the formula for which was printed on every bottle. It is useless to plead that these imported patents are so valuable that the profession must have them and must use them, secret nostrums though they be. This is not true, nor is it true that the manufacturers over there are any more frank as to the nature and origin of their wares than are American manufacturers of similar drugs.—*National Druggist, May, 1888.*

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ORIGINAL.

SYPHILIS OF THE MOUTH.*

BY GRANVILLE MACGOWAN, M.D., LOS ANGELES, CAL.

PROFESSOR OF DISEASES OF THE SKIN AND GENITO-URINARY ORGANS, MEDICAL DEPARTMENT OF THE UNIVERSITY OF SOUTHERN CALIFORNIA.

The interest to the dentist in being able to definitely diagnose any appearance of syphilis about the mouth is a double one:—

1. The protection of self against contagion.

2. The avoidance of the exposure of his clients to infection by the use of instruments or dressings not sterilized. Though recognition of the infectious lesions of acquired syphilis is paramount; yet it is not without interest to dental surgeons to be able to trace the influence of inherited syphilis upon the growth and development of the teeth, and also to understand the rapidly destructive and frightfully deformative nature of the lesions peculiar to late syphilis.

I shall endeavor to demonstrate by live models, and through painted illustrations, the various lesions and symptoms of syphilis as they show themselves in and about the mouth. There are three truths relating to buccal syphilis which may be deemed axiomatic:

1. Certain lesions well marked and distinct when present always and invariably indicate the presence of syphilis.

2. Syphilis is frequently non-venereal and innocently acquired.

3. The victim is frequently unaware of the character of his malady.

Remembrance of the first of these will prevent your judgment being warped by the social position of your clients. Attention to the second will keep you from cruelly misjudging good women, and sometimes good men. Consideration of the third will account for the apparent moral callousness of people whom you may see spreading the disease by their foul and poisonous mouths.

* Read before the Southern California Odontological Society held in Los Angeles, October, 1895.

For our purposes, the mouth is all of that mucous space included between the lips anteriorly and the posterior pillars of the fauces, together with the various organs contained therein.

Certain cardinal characteristics of syphilis occurring upon the skin or mucous membranes have been formulated by Kaposi. I shall repeat them for our assistance in understanding the appearances and progress of the syphilides at present in consideration:

1. The syphilides are sharply defined, dense and uniform cellular infiltrations of the papillary body and the corium, and differ from one another only in size.

2. These cells are not fitted to undergo permanent organization into connective tissue, but always undergo involution and disappear by absorption or by purulent degeneration.

3. The syphilitic infiltration always enlarges and disappears in the same direction, centrifugally, hence the peripheral parts are relatively the most recent, and exhibit all the characteristics of the fresh infiltration. The oldest parts occupy the center and are the first to disappear. To the initial syphilide, the chancre, as it occurs about the mouth we will first give our attention. Most usually the point of infection is the lip, by preference the lower lip, at its vermilion border, for this is most exposed to the injuries or abrasions through which infection takes place; chaps, cracks, the broken vesicles of herpes, bites, burns from pipes, cigars, or curling irons, cuts from broken drinking glasses, razors or carelessly handled dental burrs or gouges. Any sore, occurring in this situation with scant secretion, painless or only moderately painful, with a circumscribed indurated base varying in grade from that of parchment to cartilage, which refuses obstinately to heal under the application of simple protective measures, but steadily persists while the days run into weeks, becoming finally covered with a greyish pseudo-membranous deposit, is a chancre. Such sores are generally single; but multiple ones are not rare. When they exist they are due to the application of the virus simultaneously to several spots of abraded surface. Whatever their number or situation they give to the lip a stiff and clumsy look not to be accounted for by the size of the ulcer. It is rather the sharply circumscribed and growing infiltration of the tissues which gives the characteristic appearance.

The diagnosis of typical cases of chancre of the lips need only to be made from cancer. The differences are so apparent that it seems almost improbable that mistakes may be made. Yet very good surgeons have removed chancres from lips under the belief that they were dealing with cancers. The points of diagnosis to be remembered are well tabulated by Cornil.

CHANCRE OF THE LIP.	EPITHELIOMA OF THE LIP.
1. Occurs at any age.	1. Seldom before middle life.
2. Usually insensitive.	2. The seat of darting pains.
3. Has a regular outline.	3. Irregular in outline.
4. Is elevated.	4. Ragged and bleeds easily.
5. Grows only a few weeks.	5. Grows many months.
6. Submaxillary glands involved in second week.	6. Submaxillary glands involved only very late.
7. Heals under mercurial.	7. Not affected under mercurial treatment.

To this I may add I have observed that in labial cancer, usually over the peculiar waxy and curled edge of the ulcerated surface, may be seen climbing the distorted and twisted bloodvessels and plunging into the depths of the growth to disappear as do the bloodvessels in certain diseases of the optic fundus. From herpes the lack of induration and the burning sensitive surface forms a suffici-

ently distinctive diagnosis. From inflamed fissure the painful character of the latter, and the lack of involvement of the lymphatics under the jaw serve to guide us. Within the mouth cavity the most frequent seat of the chancre is the tip or anterior portions of the sides of the tongue, the tonsils, and the inner surface of the cheeks. In these positions some of the distinctive characteristics of the chancre are so modified that the diagnosis is not always readily assured. Relating to the tongue: If a single and insensitive ulcer or fissure, upon its anterior surface, persists for a week, refuses to heal under application of stick nitrate of silver, enlarges, extends continuously, develops an indurated base and becomes covered with a pseudo-diphtheritic membrane, it is a chancre. But many ulcers in this situation are not chancres. We may have an ulcer due to the abrasion and irritation of a jagged tooth, the so-called dental ulcer. This disappears with the removal of the cause. It may be an ulcerating gumma. If it is we can always elicit a history of preceding tumor under the mucous membrane, opening in the center, the development of an ulcer in a tumor and not of a tumor surrounding an ulcer. It may be tubercular. If so it has commenced upon the surface as a number of pinhead sized yellowish or pearl colored buttons of miliary tubercle raising the mucous membrane. Such nodules present a tendency to break down separately, running together as irregular and superficial painful ulcers with worm-eaten bases. I have once seen the symptom, which when present is so characteristic of tubercular ulcers, that of uniting at the bases while having bridges of sound tissue on the surface, underneath which a probe might be passed from one ulcer to another. Besides in tubercular trouble there is always evidence of tubercular cicatrices upon the neck or tuberculosis of the larynx or lungs; or the bacilli may be found in the scrapings of the ulcers. In neither the gummatous nor the tubercular ulceration is there ordinarily enlargement of the submaxillary glands.

Chancre of the tongue can hardly be mistaken for cancer of the tongue. The latter is nearly always preceded by an indurated patch of leucokeratosis, or an old and much irritated dental ulcer. Chancre is rare upon both tonsils, and has been in all cases which have been observed by me presumptive evidence of osculatory immorality. Situated upon the tonsil it may be confused only with sarcoma. The later is of much slower growth. The chancre reaches the limit of its size in, at the most, six weeks and then subsides or becomes converted into a mucous patch. Again the chancre has a crater-like excavation upon it from the beginning and is accompanied early by the indurated enlargement of the sterno-cleido-mastoid chain of lymphatic glands. Anywhere between six weeks and six months after the initial lesions of syphilis there appear the various manifestations of the disease upon the skin and the mucous membranes known as secondary syphilides. Those which concern us the most are the moist and the dry eruptions in the mouth. Some observers insist that the first local sign of general syphilis is the appearance of an erythematous rash in the mouth and throat; corresponding in color and just preceding in time the macular syphilides upon the abdomen and chest. These consider that the presence of narrow dusky-red bands of inflammation along the border of the velum, and ending abruptly at the base of the uvula is characteristic of syphilitic erythema. Though I have at times observed this brick-red erythematous arch in people the victims of syphilis, its appearance has not been sufficiently distinctive for me to place any special diagnostic value upon it. Deville and Devasse, Des Plaques Muqueuses; Arch. de Med., 1845, IX first gave to the usually elevated, rounded, pink edged, moist lesions with pearl-like surfaces the name of mucous patches, from their manifest resemblance, when situated upon skin surfaces, to mucous membranes. These patches in the mouth,

frequently the earliest to come and the last to depart, may at times be the only sign, after the chancre, which ever present itself of syphilis. But their danger to you lies in that the smallest and most innocent looking patch may convey the poison of the most virulent attack to its recipient.

I know of no lesion of syphilis which occurs in males and is absent in females. However, these secondary syphilides of the mouth are less common, and commonly less severe in woman than they are in man, for she keeps her mouth cleaner than he does, seldom uses tobacco, and less frequently raw spirits and irritating sauces.

The changes observed are due to vascular dilatation, infiltration of embryonic cells and a fibrinous exudate loaded with young cells and pus corpuscles. It is to their deposit upon the surface that the common opaline appearance of the moist greyish pellicle is due. These patches in jaundiced individuals partake of the yellow stain of the rest of the tissues. The origin and character of this opalinity is very well shown in the enlarged section of a mucous patch taken from Cornil. By reference to this plate we see these patches are really new growths in the superficial structures of the skin, which rapidly undergo retrograde metamorphosis forming microscopic abscesses in the rete. From their very superficial position they might be termed intra-epithelial abscesses. The superior layers of the epithelium show excavated cells with atrophied nucleü, or containing several nucleii or pus corpuscles. There are also to be seen in the superficial layers of the epidermis small nests filled with from 4 to 100 or more corpuscles. It is hence to be seen that this characteristic whitish gray opalinity of the coating of the patch, appearing as if the surface had been streaked with nitrate of silver, acid nitrate of mercury, or formaline, is really due to the fibrin and pus corpuscles exuded from these miliary abscesses. These patches are always preceded by surface redness, and they present a tendency to the modified circular forms peculiar to syphilis, and are accompanied by hypertrophy of the tonsils. This membrane is thin and may be removed only with difficulty. It is distinguished from diphtheria by the absence of the inflammatory symptoms and the physical depression, and by thicker, tough, buckskin or buff colored membrane of the latter. From thrush by its raised white patches with a red areola, which consists of pultaceous matter like curds, breaking readily upon being touched, and containing the fungus, oidium albicans. The characteristic shape of these patches and to some extent their appearance differs with their situation. Painless usually, when at the angles of the mouth or when irritated by tobacco or a jagged tooth they often become very painful. Without appreciable induration, when arising upon the surface of a disappearing chancre the suppleness of the tissues beneath the patch is much interfered with. Certain portions of the mouth are most prone to be the seat of the mucous patch; upon the inner surface of the lips and the cord between the two halves of the upper lip; at the angles of the mouth, where it presents a peculiar diagnostic feature: upon each lip a patch joined at the commissure by a deep rhagade, which is painful and bleeds easily, the inner surface opaline, the outer a granulating sore covered with a crust, a picture to be remembered and an object to be avoided. The patches upon the dorsum and the tip of the tongue are uneven in appearance, influenced by the varying sizes and length of the papillae. Those at the edge, following the natural folds of the mucous membrane marking the muscle septa beneath, present sometimes an exaggerated ridginess. Far back upon the tongue large papular or warty patches sometimes occur. These grow and extend as in the case I present to you, to the whole superior surface. The grossly exaggerated papillae are separated by deepened ridges, running across and along the roughened tongue.

Its opalinity is obscured here and there by the shaded brown, yellow, and gray stainings of food and medicine, all of which give to the organ the appearance so happily described by Fournier as "the toad's back." I have seen these grow and crack, exuding a malodorous, sanious fluid, and subdivide while growing, until the mouth became a nasty hole filled with a tongue that for its poisonous state and aspect might well be the despair of devils. These syphilides now under consideration rarely ulcerate; when they do the seat of such ulcer is usually at the angle of the jaw where the teeth impinge upon the tongue.

There is a rarer form of the mucous patch as it occurs upon the tongue presented to us in this patient, R——. It is a dry and non-erosive patch upon which you will notice silver nitrate or acid nitrate of mercury leaves no whitish stain. Such patches are rounded, smooth, and glossy as if polished or varnished. The papillae seem to have disappeared, been lost. Contrasted with the tissues about it the patch appears like a clearing in the forest, like a mowed place in a field of grain, a shaven space in the stubble of the beard. When we pick up the diseased tissues between the thumb and index finger we notice a certain stiffness scarcely to be justly termed an infiltration. Cornil accounts for this appearance by the loss or shedding of the corneous prolongations of the filiform papillae within the diseased limits all at once. This is accompanied by an hyperplasia of the stubby papillae themselves giving when felt the sensation of moderate infiltration. This is not a simple desquamation such as is taking place continuously from all epithelial surfaces and by which the superficial layers are shed, but a clean sweep to the red moist and varnished rete upon the surface of the true papillae, leaving no cornefied epithelium to be stained by the nitrates.

Upon the under surface of the tongue, and the gums, particularly those of the lower jaw where teeth were lost, I have sometimes met with another form of mucous patch differing altogether from those so far described to you. It is papular, round, elevated a millimeter or two, covered with a yellowish gray and closely adherent membrane, which when removed by friction leaves a bleeding surface, and under the microscope consists of fibrin, pus corpuscles and epithelial debris. In these cases, three only, the persons were tobacco users, never made a toilet of the mouth until instructed by me, and had all of them well pronounced general syphilis. For purposes of distinction these may be classified as diphtheritic mucous patches. Upon the tonsils and the pillars of the fauces, mucous patches exist earlier and later than they do elsewhere. Though insensitive, the patient often not complaining of them when their appearance is frightful, they are very apt to ulcerate from irritation. These ulcers owing I think to the structural formation of the tonsil, are likely to be kidney shaped, but covered with the pearly pellicle so indicative of their origin. Follicular tonsilitis is nearly always an accompanying malady, due to the inflammatory glandular hyperplasia. Indeed it has seemed to me that without this follicular disturbance we would rarely have in these mucous patches of the tonsil any ulceration whatever. For when they disappear it is without scars, leaving only the distended follicular mouths to remind us of the process. The palato-lingual fold is frequently the seat of the mucous patch. In this situation, which is practically the commissure of the sphincter of the throat they are commonly accompanied by a burning rough and scratching pain, often very severe. My advice to you is always in working about the back teeth of any person you may suspect of having infectious syphilis to carefully examine the oral commissures and the glosso-tonsillary folds, for mucous patches. Syphilis of the palato-tonsillary region is not at all constant in its manifestations of pain. Great pain is sometimes an accompaniment of small patches, and no pain not unfrequently is seen when the diseased area is great.

The region posterior to the pillars of the fauces do not concern the dentist, but in passing I may say, the syphilide we have had under discussion rarely occurs posterior to them. In the words of Fournier: "The pillars of the soft palate are the pillars of Hercules for the mucous patch and this is the more inexplicable as this region is most prone to tertiary accidents." The regions we have mentioned are the usual seat of the mucous patch; but it is to be remembered that it may and sometimes does occur upon any other portion or part of the mouth. There are certain characteristics of all of the forms of mouth syphilis to which I must direct your attention. These remembered will assist you materially in forming your judgment as to the character of any sore you may have before you in a mouth:

1. They are nearly painless unless irritated mechanically or chemically or by tobacco.

2. Any irritation of them provokes a great secretion of saliva. Indeed where they are numerous, a kind of salivorrhea is often present, the patient dribbling saliva during his waking and sleeping hours.

3. They all tend not only to disappear spontaneously but also to recur indefinitely, more especially in users of ardent spirits or abusers of tobacco, or those who chew toothpicks and gum.

4. They all have the modified circinate forms seen in syphilides elsewhere.

Though tertiary syphilis may affect any of the structures entering into the formation of the mouth it is upon the tongue and soft palate that its ravages are principally spent. The tongue may be attacked by a general infiltrative inflammation: 1st, superficial, the small round cells being packed into all the tissues lying outside of the muscle bed; or 2nd, deep, the same process extending into and between the muscles of the tongue. The superficial form of syphilitic glossitis, when it occurs, makes its appearance about the fifth year after infection. The induration produced may be uniform, spreading over the entire surface of the tongue, a veritable hyperplasia, or it may be confined to a number of nodular patches. The surface of these latter is smooth and glossy-like, and for the same reasons as the peculiar mucous patch, which I have shown you upon the patient R——. Syphilitic glossitis is slow in developing and resists treatment. It may last for many years in spite of all treatment finally ending in atrophy. The tongue becomes stiffened and interferes with talking and swallowing, indeed it is the interference with these functions which first draws attention to its condition. Sometimes it grows so large as to require surgical interference. Any chronically enlarged tongue unless proven otherwise may be regarded as syphilitic.

You have often heard of gummatous tumors and the fearful deformities caused by their ulceration. By a gumma is meant a circumscribed new growth, due to the influence of the virus of syphilis, and consisting of small cells, closely packed in the anatomical tissues, and presenting no capability of organization into connective tissue but tending rapidly when uninfluenced by treatment, to death, disintegration and the formation of excavated ulcers. Upon the tongue they may have their primary seat in the mucous membrane, or in the muscular tissues. No well authenticated observation of a syphilide of the mouth pustular from its commencement, has ever been made. So we have only these tertiary lesions to consider. All purulent ulcers of the tongue, due to syphilis, and not arising from a gravely irritated mucous patch are preceded by a gummatous nodule orginating within the tissues of the organ. This small tumor softens in its center, and breaking down towards its circumference, gradually enlarges, forming either a deep punched-out ulcer with steep sides and worm-eaten base,

covered with a yellowish lardaceous membrane or mass, or a kidney shaped sore with a livid areola and a sloping base covered with the same kind of membrane. Such ulcers are more apt to be one of a group than to be found single. This group forming not unfrequently the serpiginous signet of the Sultan of lues. The deeper its origin the greater the destruction of tissues following the decay of a gumma. But the tongue is a curious organ, seemingly capable to a great extent of regeneration, and however large the sores may have been, their cicatrices are seldom deformative.

The differential diagnosis of this disease from cancer of the tongue is based upon these points of distinction:

GUMMA OF THE TONGUE	CANCER OF THE TONGUE.
1. Is the growth of days or weeks.	1. Is the growth of months or years.
2. Is a tumor which ulcerates.	2. Is an ulceration surrounded by a tumor, destroying it yet extending with it.
3. Purulent discharge abundant and like soft and decayed cheese.	3. Discharge sanious and filled with gray or black sloughs.
4. Pressure dislodges only caseous masses.	4. Pressure dislodges sebum plugs not unlike those found in erythematous lupus of the face, from the mucous membrane surrounding.
5. Painless or nearly so.	5. Pain at intervals shooting toward ear—diagnostic.

The ulcer of commencing cancer is generally oval but may be a simple elongated fissure with a firm base and everted edges, the ulcer extends up to the border of the growth but the latter always keeps a little ahead. Its surface is irritable and bleeds easily. When the infiltration of the tissues becomes extensive it is accompanied by marked anemia and sallowness.

When an ulcerated gumma of the tongue is neglected or irritated there is much danger of cancer developing upon it. Unless these ulcerations of late syphilis upon the tongue have been under observation from the time of their first appearance it is difficult sometimes to positively distinguish them from tubercular ulcerations. But a proper attention to the points laid down when speaking of mucous patches of the mouth will generally enable you to do so.

The simple glandular ulcer with its red rim, steep sides and soft yellow or gray base, without infiltration, and painful, can not be confused, by an observant man, with a syphilitic lesion secondary or tertiary. In the ulcerations of mercurial stomatitis, the blue line on the gums, due to the deposit of the metallic mercury about the necks of the teeth, and the swollen tooth-marked tongue serves to distinguish it from the loosening of the teeth due to gummata seated about the necks or otherwise sound and painless teeth. It is to the infiltration of the hard and soft palates with tertiary growths or deposits that are due the most startling, disgusting, and tedious results of ulcerative syphilis of the mouth. Sometimes the vault of the mouth melts away in a night. Without warning of their presence the gumma situated between the layers of the soft palate or within the hard palate, break down and unite the cavities of nose, mouth and pharynx. The quacking voice and pitiful efforts at swallowing of these victims are familiar to most of you. And much to the credit of your calling, it is in these cases that the fertile resources of the dental surgeon have shown themselves frequently successful in relief. In two cases coming under my observation one in my own service and another in that of my friend, Dr. D. Montgomery, of San Francisco, I have

seen the soft tissues overlying and the alveolar processes of the upper jaw at the juncture of its two halves, become the seat of an immense and sluggish gummatous thickening, which after a long time becomes necrosed. This process in my case extended to the hard palate and the dome of the mouth.

Before ever regarding the tongue as diseased it is well to remember that the normal appearance of this organ differs greatly as to its roughness, size, color, the length and number of its papillae, etc. And that any inflammation of it or its adjacent structures is apt to exaggerate this greatly. The scaly patches give most difficulty in differential diagnosis to the expert, and to those unused to seeing them are entirely confusing. For this reason I shall not give them consideration. I happen just now to have no well marked cases of such patches to present to you at this clinic I have never yet met with such a patch that was infectious. Those dry patches upon the tongue and cheeks, harsh and darker colored than the normal tissues, found in the mouths of smokers, due to the pipe or cigarrette, and appearing upon the side these articles are habitually held upon, need not be mistaken for scaly patches of syphilis.

I will finish my clinic by referring you to this chart marked No. 3 upon which are depicted the various modifications of shape and character observed in the teeth of children born of syphilitic parents. These deformative irregularities of the permanent dentine are usually accompanied by a stunted development of the skin and low vitality of the cornea. The name of Hutchinson's teeth is given to them, after the great English surgeon, Johnathan Hutchinson, to whose researches the primary description of their significance is due.

Stress is placed upon the formation of the central incisors of the upper jaw. "The special pathognomonic sign of infantile syphilis is said to be a want of normal width of their cutting edges, so that instead of being broader there than at any other portion, they are narrowed, rounded, and have a peculiar crescentic edge, the surface of which is inclined upward and forward instead of backward, as in normal teeth. Besides they are apt to be dwarfed in size, to stand apart, and to converge toward each other." These teeth are not excluded from the homes of the rich. But it is in orphan asylums and foundling homes that they are most frequently seen. My personal observation teaches me that the depressing influences of infantile tuberculosis produces a powerful modification upon the permanent dentine, often creating irregularities of the incisors and six year old molars to be with difficulty distinguished from the so-called test teeth. So I have come to place greater value upon the change of character of teeth as diagnostic of infantile syphilis than upon modifications of their own shape. It is when I find in the position which should be occupied by a six year old molar one or two lateral incisors, or in the situation naturally occupied by incisors, premolars or canine teeth being erupted, that I feel sure the syphilitic influence alone has stuck the pegs in the wrong hole, for I have never noticed this character of deformity of misplacement in tubercular teeth.

In acquired syphilis, where the toilet of the mouth is poorly made, or not at all, and the individuals use tobacco, gingivitis, pyorrhoea, and retraction and exposure of the necks of the teeth, even necroses of the jaw, sometimes occur where no mercury has been given. And really it would be interesting to know what influence syphilis plays in the causation of the badly retracted gums so frequently seen in your offices.

321 S. Broadway.

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FORTY-NINE LARVAE OR TEXAS SCREW WORMS

REMOVED FROM THE NASO-PHARYNX AND SOFT PALATE.

BY THOS. J. MCCOY, M.D., LOS ANGELES, CAL.

EX. HOUSE SURGEON MANHATTAN EYE AND EAR HOSPITAL N. Y.; EYE AND EAR SURGEON LOS ANGELES CO. HOSPITAL, L. A. T. AND MT. LOWE RY'S.

Rafel O., age 40, is employed upon a ranch in the San Fernando valley, principally having the care of horses. Oct. 1st, not feeling well, he lay down on some sacks and fell asleep near the eating house, where there were many flies.

The next day he began having pains in the forehead, eyes, cheek bones and throat; much more marked upon the left side. These became so intensified that on the third a physician was summoned. As he became still worse the family physician, Dr. Wernigk was called out, and while there the patient passed two Texas screw worms. The doctor had him brought to his home in the city, and I was called in consultation immediately on his arrival, at 12.30 P. M.

The patient was in terrible agony, saying he had not been able to eat, sleep, or keep still, and had been almost wild. Had elevated temperature, edema of lower lids, swelling over malar bones more marked on the left side. A fetid, disagreeable odor was emitted from his nose.

Having the sun rays to reflect gave a fine opportunity to examine him. After prying open his mouth and depressing the tongue, we found an intense inflammatory distention of the soft parts between the pillar of the fauces and uvula on the left side. The latter was edematous. After cleansing the nostrils of the muco-purulent, bloody discharge with Seiler's solution and cocainizing, I found well marked atrophic rhinitis. The middle and inferior turbinated bones were almost entirely obliterated, and as a result, I could get an excellent view through the nose to the post nasal space. Pus exuded from the region of the eustachian orifice. From this I pulled two wriggling maggots with the nasal forceps. Two more were caught as they showed themselves from below in the post nasal space.

*Read before the Los Angeles County Medical Association, Oct. 18, 1895.

One came from near the ending of the lachrymal duct. On the right side of the back of the post nasal space I caught one, bringing away some sloughing tissue. Believing from the swelling in the mouth that the larvae might have burrowed down into the soft palate, I made a free opening from which a small quantity of pus exuded. On pressing about the wound with the handle of the probe, one presented through the tissue near the left tonsil.

We carefully insufflated calomel over the parts with the DeVilbiss' powder blower, after cleansing again with Seiler's solution.

Cleansing was ordered each hour, with a little calomel blown in afterwards, and morphia to quiet him. At 5 P. M. we found the patient resting better, having blown and spat out twenty-one worms.

We brought a 3 per cent. solution of Pyrozone and sprayed it full strength into the cavities. This was continued through the night each hour. Insufflations of calomel every 4 hours. He being very much exhausted and not able to swallow solids, whisky and milk were given.

Next morning we found he had passed 49 maggots in all up to about midnight and none since, the treatment having dislodged all in about ten or eleven hours.

I have a few preserved here in this vial in alcohol, which I pass for your inspection. During the after part of the night, the patient had slept and rested better. Swelling diminished except over the left lachrymal duct.

The conjunctiva of the left eye was quite red and a lachrymal abscess threatened. Because of this, and having taken a worm from the region of the end of the duct, causing me to believe one must have crawled into the duct or caused an irritation sufficient to produce the lachrymal irritation, Dr. Wernigk flushed the naso-pharynx with the post nasal syringe with bichloride solution, but no more worms were expelled. Hot fomentations were ordered to lachrymal swelling five or ten minutes each hour. Calomel withdrawn for fear of salivation. Pyrozone alternating with a mild bichloride spray each two hours.

Dr. W. saw the case in the evening and ordered him to my office the next morning. I opened the lachrymal abscess going through with Bowman's canaliculus knife, probing and syringing out the duct. After this the patient made a rapid recovery, the aseptic solutions, dilute Pyrozone and Seiler's, continued less often.

While maggots in the nose and surrounding cavities are thought to be uncommon, we are led to believe they occur more frequently than is generally supposed, judging from the number of cases reported during the last few years. This condition has long been known in Mexico, South America and in the East and West Indies. Most of our literature consists of writings from these countries and the western states, especially Texas, whence the larva has received its name.

The most exhaustive description of the disease in our language is given by the late Sir Morell Mackenzie in his work on diseases of the throat and nose. Of the fly that deposits its eggs in the nose from which the screw worm is developed, I have sketched copies and pass for your inspection.

The maggot as soon as it is formed works its way into the tissues through the nasal duct, where it produces an intense inflammation causing destruction of the soft parts, necrosis and caries of bones; it occurs mostly in the country and among those who care for cattle.

The reported symptoms have been marked depression of the general health, soon followed by intense frontal headache, a muco-purulent discharge from the nose, often with bleeding, and usually swelling of the eyelids. Patient may become delirious and develop dangerous mania.

To differentiate this trouble in the beginning is impossible without a positive history, or until the larvae are found in the nasal discharges.

The prognosis is favorable where the condition is detected and relieved early, but many cases terminate fatally because the maggots have produced so much destruction of tissue before being discovered. As to the best mode of dislodging and evacuating the worm, several more or less successful remedies have been reported.

It seems to me, since the discovery of that aseptic "the pus searcher" and styptic, peroxide of hydrogen or pyrozone sprayed or injected into the lodgings of the maggot, would be so antagonistic to the condition in which they revel, that they would vacate, even if no other direct action was produced upon them. It surely prepares the way well for other remedies. One that is extremely popular even among the cattle men, and very effectual is calomel, insufflated directly into the cavities. Solution of bichloride and alkalies, chloroform, turpentine, petroleum products and others have been used.

Jacobinson notes that the presence of ozena or foul smell of any kind is a great attraction to the fly. He reports a case in which death from acute encephalitis followed permeating ulceration of the ethmoid bone. Removal of the larvae and dressing are usually sufficient.

R. G. Gennings, H. S. Douglass, T. Darvin, and E. Torres report cases of maggots.

During the past four years a few cases have been reported (*Sajous) of which I shall briefly speak.

W. H. Grayson alludes to the possibility of mistaking the affection for idiopathic erysipelas, and greatly recommends campho-phenique, with which he flushed the cavities by means of a nasal syringe, and obtained rapid recovery. The tenacity of life of the larvae in media usually fatal to all other forms of life, is emphasized. Immersion in pure chloroform even not being followed by immediate death. He rightly criticizes Küchenmeister, who recommends their extraction with forceps.

Delobel, of France, and Jacobsen, of Havana, Cuba, each report a case. The former seemed to have obtained satisfactory results with alkaline washes, while the latter employed benzine injections, followed by carbolized washes. Brokaw, of St. Louis, described a case simulating erysipelas; and Allingham, of Bishop, Cal., one simulating meningitis. The former subjected his assistant to the trying ordeal of picking the larvae out with forceps, while the latter found in the use of Marchand's peroxide of hydrogen and injections of kerosene more rapidly effective and less trying remedies on both physician and patient.

Myiasis—F. J. P. Salts, of Lucknow, India, June 1st, relates a case of myiasis narium in connection with which he conducted a series of experiments. As a result of these he concludes:

1. That maggots cannot beget maggots.

2. Maggots obtained from decomposing flesh are not capable of changing their state, and live an indefinite period if left in putrid material.

3 Maggots found in decomposing or putrid meat are very different from those obtained from ovarious insects. The larvae in the case described were those of the musca vomitoria.

In Texas, according to J. P. Kimball, of Fort Clark, the offending fly is usually the sarcopha gageorgina, (Wiedemann,) an ova-viviparous insect, the larvae of which are hatched within the oviduct. To ascertain the time occupied in their development the larvae were expressed from a fly, upon a piece of tainted meat, in a wide-mouthed bottle and placed in the sun. In twelve hours it was estimated

that the mass had increased in bulk forty fold. In a case reported by the author the injection of chloroform and water in equal parts was found insufficient and two drachms (eight grammes) of pure chloroform were used, the pain produced by the injection was allayed on injecting carbolized oil, and the nostrils washed out by means of a post-pharyngeal syringe with a 10-volume solution of peroxide of hydrogen. This was repeated once a day for 3 days and obtained a cure. The solution of peroxide of hydrogen was continued at intervals of from five to six hours for several days, having proven very agreeable to the patient as a disinfectant. About 300 maggots had been ejected. In a letter referring to the above, Cerna, of Galveston, stated that he had seen four cases of the same nature. The only satisfactory treatment was calomel by insufflation. All the patients recovered. In one case 388 maggots were counted. The writer had had no experience with chloroform. He does not agree with Kimball that the fly deposits upon an unsound membrane, three of his patients having been entirely free from local constitutional taint.

Bryson Block.

ADDRESS AND DEMONSTRATION OF VAGINAL HYSTERECTOMY BY THE CLAMP METHOD.*

BY DR. SHERWOOD DUNN, LOS ANGELES, CAL., LATE OF PARIS, FRANCE.

Mr. President and Ladies and Gentlemen:

Your distinguished president adds a graceful courtesy to the honor he has done me in inviting me to appear before you, in announcing that I will read a paper on Vaginal Hysterectomy. The only paper I have to read is this small memorandum I hold, and in addressing you upon this subject, the historical and statistical facts are drawn from memory; and I ask your indulgence for any slight errors or omissions I may make.

Vaginal hysterectomy is a new operation in its perfected *technique*. It was first performed, I believe, by Sautier of Constance in 1822, and again by Recamier in 1829. From 1829 to 1879, because of the multiplied failures, it was done but rarely, and then only for cancer. With the advent of antiseptic surgery, it again was brought into public notice in the publication by Czerny of a *resume* of cases in a Vienna medical journal. Between 1880 and '85 the operation gained ground, and successful operations were published by Péan, Terrier and Richelot, but active interest in this procedure dates from the celebrated discussion of the Surgical Society of Paris in 1888, when Verneuil, that old war-horse of the French school of surgery, arose in that distinguished body of savants and declared himself absolutely opposed to the advent of this new procedure, and presented a favorable array of cases treated by the chain ecraseur. So strong was his influence, and his opinion was held in such high regard, that it must have required a great degree of moral stamina to permit of the expression of opposition to this *fiat*, which was limited to a few younger men, notably if I remember, Richelot, Bouilly and Terrier, and, I think, Ségond. These gentlemen had the courage of their convictions, and particularly M. Richelot, who in 1891 excited anew the animated discussion of this operation by presenting before the surgical society again a resumé of twenty-five new cases operated upon for cancer, with ten relapses of the disease and fifteen without relapse, the shortest of which was then one year and five months. Eminently successful results were at this time presented by the other surgeons I mentioned in connection with him, and from this date vaginal hysterectomy has steadily grown in favor with gynecologists, until now it is performed for a variety of conditions other than cancer. I was surprised to find an expression of almost universal

* Read before the Los Angeles County Medical Association, Nov. 1st, 1895.

opposition to the advance of this operation in the American Association of Obstetricians and Gynecologists, at the meeting in Chicago held the last of September, where I had the honor to make a demonstration similar to the one I propose to bring before you this evening. I look upon an uncomplicated vaginal hysterectomy as one of the simplest of the capital operations in gynecology, and with very little practice, in the hands of an experienced operator, less dangerous to a patient than a laparotomy. But I would not be understood to advocate indiscriminate hysterectomy. I am intensely conservative by nature, and believe in capital operations only after the exhaustion of tentative measures; but where hysterectomy is indicated, I think it preferable to any other procedure. On account of the complete control which is had over patients in European hospitals, especially on the continent, the knife is used more freely than in this country; and I am satisfied that vaginal hysterectomy is practiced to excess in Europe.

Certain elements in the operation should be made prominent. The danger increases in proportion to the length of the operation. The shorter the duration of the operation, within certain limits, the less the patient suffers from shock and from the effects of the anesthetic. I should consider fifteen or twenty minutes the average duration in the hands of the masters it has been my privilege to study under. With a view to shortening the operation, Professor Richelot in 1885 first employed the clamp method, and although Péan at about the same time claimed priority for this procedure, yet it is to Richelot that surgery is indebted for the present perfection of the *technique* of this operation, and he is I think universally conceded by his compeers to be the "King of vaginal hysterectomists." I have seen him do this operation in four and one-half minutes; and he reports having done 144 vaginal hysterectomies between February, '94, and May, '95, without the loss of a single case.

The clamp method has the advantage over the ligature of shortening the duration of the operation more than fifty per cent., and the fear that is felt by those not familiar with it of post-operative hemorrhage is groundless. By a series of observations made at the autopsies of Broca Hospital, Paris, part of which were made by myself, it was demonstrated that from the point of impingement of the forceps on an artery, the blood clot extended from three-fourths to a centimeter in its lumen, and that within twenty-four hours after the operation, that part of the clot nearest the instrument, and consequently farthest from the blood current, began to organize itself, and the fibrin, by the natural inflammatory action set up by the traumatism would, before forty-eight hours, assume a consistency that rendered its dislodgement practically impossible.

The indications for this operation should be looked for chiefly in the uterus and not the adnexa. Where you have an enlarged uterus showing metritis, perimetritis, and probably diseased parenchyma even though the adnexa are but slightly involved, hysterectomy gives the best results.

Bitateral disease with suspected pus, with perimetritis and possible pus pockets in the adhesions; purulent pelvic abscesses complicating the uterus following neglected and long standing diseases. Uterine fibroma when found in the median line, and the size of the organ has not rendered its abstraction too difficult through the vagina, although I have seen Paul Sègond extirpate a fibroma weighing sixteen pounds through the vagina by the *morcellement* method.

There is considerable opposition to this operation in the presence of purulent disease, and also very firm adhesions are by some looked upon as a contraindication. My experience in the latter has been that in seizing a firmly adherent uterus with the Richelot improved vulsellum forceps, which I hold in my hand, that you can always draw it down, after making the incision around the cervix,

sufficiently to reach and clamp the uterine and ovarian arteries, and then the rest is a matter of patience and careful manipulation. In the case of pus tubes and general purulent abscesses I think it will appeal to you as reasonable that your chances for successful drainage are far superior by the vagina, which gives you drainage *downward*, than by the supra-pubic route, where your drainage must be *upward*. The vaginal operation also affords you the opportunity to daily flush out the field of disease more thoroughly and fearlessly than you can do through an abdominal incision.

It is important that your patient should be carefully and properly prepared for this operation. The previous evening the vagina should be thoroughly scrubbed with soap and water by aid of a hand brush, and then flushed out with sterilized water and packed with iodoform gauze. In the morning just previous to operating the vagina should again be scrubbed as before and then flushed out thoroughly with a 1–2000 solution of bichloride. Catheterize the bladder, shave the pubes, and protect the neighboring parts with gauze wrung out in 1–1000 bichloride. Curette the uterine cavity and inject a solution of ferri perchloride or other antiseptic astringent, then seize the cervix firmly with these five-toothed forceps, draw it forcibly toward you and down upon the perineal valve previously inserted, with curved scissors or the bistoury make a circular incision completely around the cervix just below the vaginal incision, with aid of the finger press the tissues progressively upward until you pass the uterine artery, with the finger and thumb placed each side of this organ you feel exactly its pulsations, and with these straight hemostatic forceps seize and compress it, and sever it by cutting between the forceps and the uterus. You should be careful to direct the point of the forceps toward the uterus to avoid compressing the ureter in its grasp. When the uterine arteries of both sides are severed, continue the separation of the tissues upward anteriorly and posteriorly until you enter the peritoneal cavity, then advance the anterior retractor with which your assistant has steadily elevated and protected the bladder in front into the peritoneal opening and maintain it thus.

By splitting the uterus upward in the median line from its cavity outward, anteriorly, you can from time to time seize the organ higher up by each lip of this incision with your vulsellum forceps and more surely control it in the different maneuvers. The point now is to clamp and section the ovarian arteries and you will find this materially favored if you can antivert the fundus toward you. Sometimes the abnormal size and length of the organ renders this difficult or impossible. In this case amputate the cervix to shorten the uterus, and then, if it still refuses to revolve forward, split it into two halves and bring successively each half forward and clamp the arteries either in front or behind the ovary as the case may permit. Be careful to never let go with one pair of vulsellum forceps before placing another pair in position, and also it is important that the points of the hemostatic forceps placed on the uterine and those placed on the ovarian should pass each other so the broad ligament shall be comprised fully in the two pairs, otherwise you are liable to considerable hemorrhage.

In a non-adherent, uncomplicated case you will ordinarily have four pairs of forceps in situ after having extirpated the uterus, but the operation is by no means complete. The posterior section of the vaginal wall, that corresponding to the cul de sac of Douglass always bleeds copiously and by aid of the small hemostatic T forceps of Pozzi, which I show you, you should bring the sectioned peritoneum and that of the vagina together as I indicate here on the blackboard; with the aid of three or four pairs the hemorrhage here will be fully arrested. Then you should spread out the border of the broad ligament and place a pair of small forceps on every bleeding point. The aim is to not leave the slightest oozing,

not for fear of any danger to the patient from hemorrhage, but to protect her from the danger of infection, as blood is one of the best of culture mediums for germs.

If the case is one demanding drainage, place two or three strips of iodoform gauze together and with dressing forceps carry these ends just beyond the sectioned border into the peritoneal cavity, then pack the centre of the vaginal opening between the forceps clear down to the vulva with iodoform gauze and also around between the forceps and vaginal walls to protect the tissues from erosion. Place a rubber T catheter in the bladder cover all over with cotton and a T bandage and place the patient in bed, putting a round bolster just below the thighs upon which to rest the projecting ends of the forceps to relieve the parts and the patient of their weight.

The forceps are removed at the end of forty-eight hours, and the patients bowels should be moved by enema the third day. The patient is kept rigorously in the recumbent position for twenty-one days with daily dressing of the parts. The wound contracts and cicatrizes completely pushing a stump of cicatricial tissue *inward* which acts as a sort of pessary support to the abdominal contents. I have yet to see the first case of hernia following this operation.

When I first entered the hospital service in Paris, I was constitutionally opposed to vaginal hysterectomy. It appeared to me to be an inhuman and brutal operation. My opposition was fostered by being attached to one of the most celebrated laparotomists in Europe, Professor Pozzi, who can manipulate the pelvic organs and take out pus tubes through an abdominal incision that permits only of the insertion of two fingers. He is justly celebrated as being one of the mort expert operators of the present day, and I predict that if he lives he will achieve a reputation second to no living surgeon. It is only natural that daily contact with such a man, who extends a courteous welcome to every foreigner and is worshiped by those around him, should render difficult an unprejudiced consideration of the methods of other men, but the more I have seen of this operation in the hands of such masters as Pozzi, Richelot, Terrier, Bouilly, Segond, LeDentu, Quénu, Péan, Lucas-Championnière and Aubean, the more I have been compelled to recognize its utility, until I now look upon it as one of the most benign procedures known to gynecology for certain limited conditions.

INTERESTING EXPERIENCE IN GALL BLADDER WORK.*

BY J. TAYLOR STEWART, M.D., LOS ANGELES, CAL.

A gentleman, 55 years of age, called on me on October 1st, with the following history. About one year ago he was treated for an illness attended by jaundice. He was very sick for several weeks, finally making a satisfactory recovery. This is not an official account. However, we have an authentic account of another illness, coming on about four months ago. His treatment in the case was conducted by a most skillful, well and favorably known medical gentleman. This gentleman made a diagnosis of catarrhal disease of the duct. During the last month of the doctor's observations, the patient became jaundiced; a condition which became rapidly more and more intense, until he was as yellow as possible, the feces indicating an entire absence of bile; the urine loaded with it. The liver was large; appetite good; emaciation extreme. This patient never had pain; never a symptom of biliary colic, except jaundice.

After earnest conference with the attending physician and several of my surgeon friends, we decided to make an exploratory operation. Assisted by several

*Read before the Los Angeles County Medical Association, Nov. 15, 1895.

leading surgeons of this city, I cut down on the gall bladder, found it very small and hard. I now incised it, finding it empyemic; and with curette and forceps removed a dozen or two gallstones, some of which allow me to show you. The stones, to be sure, possess no special interest; but the fragments of stony incrustation, which occupied almost the entire mucous surface of the bladder, as well as that of the cystic duct, will be very interesting to you, this incrustation being so intimately imbedded in the wall as to require force to separate it, This was a most curious condition. A solid wall, so to speak, extending into and occluding the cystic duct.

After extracting several stones from the dilated duct, along with the stony shell beyond this point, it was found to be impervious. We endeavored in vain to catheterize the duct from this point. One gentleman humorously remarked, "It is a wound one is anxious to get his fingers into and as anxious to get them out." You observe the gall bladder is contracted and much thickened. Its condition of empyema and disorganization has made it so friable that cholocystenterostomy was impossible, if, indeed, there had been any occasion for it. The adhesions were wide-spread and firm. Just at the point where we were unable to pass the probe was a very resisting mass. We at one time believed it to be a stone. I pushed a knife into it, intending to remove the stone, if present. I found it to be an inflammatory mass, the bladder being so adherent to the liver and other surroundings, and the case being so plainly, utterly hopeless, as to forbid an effort to extirpate it. We still, however, entertained a forlorn hope that the hepatic entered the cystic duct beyond the obliterated region. Our gravest apprehensions were realized. After one week of somewhat encouraging progress, he succumbed, apparently to exhaustion—inanition.

With the purpose of condemning it, I wish to allude to the extensive drain use of gauze in abdominal wounds. If used in a manner to accomplish effective drainage, it becomes so engaged in granulation tissues that its removal is a severe traumatism, and is inflicted at a time when patient and tissues are illy prepared to sustain it. For drainage in extensive suppurating areas, it is ideal; but its presence in the peritoneal cavity in contact with normal intestines, to collect and transport septic matter, is dangerous. One or more properly disposed glass drains will give better drainage, with far less violence to tissues; changing the position of tubes at time of dressing will prevent granulation tissues from entering the holes in tubes. Recently Dr. Cowles and myself used the short tube in a case of puerperal sepsis. We sewed it to the cervix, in order to confine it to the uterus. We adopted the same expedient in draining a pelvic abscess, opened from the vagina. The rubber tube, if soft, will collapse; and it can not be kept as clean as glass. The use of the tube secures perfect drainage, and facilitates the direct treatment of the septic cavity.

Permit me to relate very briefly another case of curious interest. A few days after operating upon the old gentleman, I was requested by a medical gentleman in this city to see a young man, furnishing the following history: During the past year he has had frequently recurring attacks of pain, referred to deep liver regions or back and stomach. The pain, during these attacks, was so severe that his physicians were compelled to resort to chloroform and morphia to secure relief. His treatment was the orthodox one for gall-stones, each attack being followed by intense jaundice and bileless stools, nausea and vomiting. I fully concurred in this diagnosis of the former physicians, and advised that surgical treatment be at once adopted. His physician joined me in the advice. The last seizure was one of exceptional severity and persistence. I cut down on the gall-bladder and duct with the most perfect confidence in diagnosis, expecting to find

mechanical obstruction by stone. Imagine my surprise when it became a matter of demonstration that neither bladder nor duct contained stone. I was able to palpate and outline the duct with a degree of distinctness which put this question beyond peradventure. Curiously enough, there were numerous constricting bands in this neighborhood. There had been pretty general inflammation around the duct at the time. I gave as my opinion to my physician friends that these adhesions were responsible for the obstruction by constriction of the hepatic duct at the junction of the cystic duct. These adhesions were rather boldly broken up. I requested my friends to examine with reference to the general condition of adhesions; their diagnostic acumen and good judgment sustaining me.

The man made a good recovery. The jaundice disappeared. In the feces, the bile reappeared, following just like effect follows cause, or rather, the removal of cause.

This case is not without other prominent perplexities. He has entire confidence in the permanence of the result, (he is now discharged cured,) as have the gentlemen who assisted me. He has not had so perfect relief before. Whether these constrictions were causative I do not know, but recurrence will not be a surprise. It is difficult to understand the paroxysmal character of the attack with this theory of causation. That the disease was catarrhal, and obstructive, admits of no doubt. I should indeed be happy to understand the paroxysmal feature of the case.

Burdick Block.

GOUT AND ITS TREATMENT.

DR. DEBOUT D'ESTRÉES, PARIS.

Gout is one of the most painful maladies with which suffering humanity is afflicted. It is also one of the most tenacious, and tortures its victims from the cradle to the tomb. Let us take one of the innumerable gouty subjects who pays no attention to his diet, who turns a deaf ear to the warnings addressed to him by his ill-used digestive organs, who contents himself at each periodical attack with using one or more of the panaceas better known to patients than to the medical profession, and draw a rapid sketch of his life.

When a child he frequently suffered from attacks of epistaxis. To the alarm of his parents, during his adolescence, he was afflicted with headaches. Later on his tongue was always coated, accompanied by constant gastric troubles. Then came many of the following: neuralgia, including, very often, sciatica, very painful and very difficult to control; cardiac palpitations and utter inability to work, even several hours after meals; the stomach was distended, accompanied by continual eructations. To all which may be added skin disorders, eczema, psoriasis, pruritus. Later still, we find superficial fat on the abdomen, stoppage of venous blood in that region, hemorrhoids, hypertrophy of the prostate, congestion of the liver, asthma, brick-dust sediment in the urine, nephritic colic, articular attacks of gout, with, later, calcareous deformations of the joints. If the disease is not severe enough to induce œdema in the affected parts, it is nevertheless true that after two or three attacks, in the foot, for instance, the gouty patient cannot walk for an hour without fatigue, although his foot shows no outward trace of the disease; and nothing can be seen to indicate weakness in the joints. He is obliged to give up shooting, walking, and every form of necessary exercise.

Finally, in the last stage, the organic force which in youth was strong enough to react against the repeated assaults of the gout fiend, is now altogether wanting. Uric acid diathesis gives way to alkaline diathesis; the prostate has become swol-

len under the combined influence of age and the congestion of the pelvic organs customary in gout; the patient can no longer micturate regularly, owing to the volume of the prostate; the urine stagnates in the bladder, it becomes alkaline and irritates the mucous membrane of that organ, inducing catarrh. The kidneys, if not already in a condition of parenchymatous nephritis, speedily become so; the tissues are infiltrated; the continual desire to urinate in the night deprives the patient of rest, with a consequent loss of appetite; his strength gradually ebbs until he breaks down completely. He is now suffering from gouty cachexia. Or again, atheromatous degeneration, fatty degeneration of the heart with interstitial or parenchymatous nephritis and pulmonary congestion, put an end to the sad train of disorders.

This picture is a true one and not overdrawn. Garrod says that gout has a very marked tendency to shorten life. The gouty subject, contrary to the generally received opinion—owing to which this disorder is not cared for as it should be—the gouty subject, I repeat, is a sick man all his life. People die of gout, not only because the disease has, by the use of dangerous internal remedies, been transferred from the joints where it is originally found to the viscera where it is fatal, but also by reason of the ordinary complications that follow upon it. The immediate cause of death may be found in the kidney, the heart, the liver; or perhaps it is pulmonary congestion, angina pectoris, or a disease of the brain induced by gout.

There are in this world thousands of gouty persons who never had and never will have gout in the joints. These people are said to be suffering from gravel; they are called dyspeptics; or they have eczema; or they are asthmatic or diabetic patients—for there is a gouty diabetes which is not accompanied by the serious general phenomena usual in diabetes proper, being simply characterized by excessive muscular fatigue; and this gouty diabetes is only a transformation of gout. It has been observed that there is no such thing as gout, but only gouty persons; that is to say, that no two gouty patients can be found whose symptoms are the same as to the progress of the disease and its different forms. Gouty patients have been classified according to constitution and temperament; the disorder being described as articular gout, nephritic gout, muscular gout, neuropathic gout, or gastro-hepatic gout. But a given patient whose gouty symptoms have been classed as "articular" may to-morrow be found suffering from gout in the kidneys or from diabetes, as is often the case; and the articular type is thereupon transformed into the nephritic or hepatic type. And this patient, although he continues to be gouty, may have no further trouble in the joints. Gout is hereditary or acquired, and is more easily cured in the latter than in the former case. It is a diathesis; a general disease characterized by the presence in the blood of an excess of uric acid. The gouty exacerbation is accompanied by a deposit of urate of soda occupying the interstices of the periarticular tissues; and it is this substance which, accumulating, forms the tophus, more or less constantly found in cases of gout. The patient's urine is always clear, and shows no marked abnormalities by analysis, except about the time of the periodical crisis, a fact which is readily understood, inasmuch as the gouty subject does not eliminate the excess of uric acid produced in the organism. Despite the favorable results of analysis, the kidneys work badly, which circumstance, it may be parenthetically remarked, explains the frequency of kidney complications in connection with gout.

What, then, is the best means of alleviating gout, and how can it be cured? We must find means of enabling the gouty subject to eliminate the products which torture him through three natural roads, the kidneys, the intestines and the skin, which form an eliminative trinity. Next, the formation of urates and uric acid must be controlled, as far as possible. All the various medicines hitherto employed

for gout have failed: some of them have been useless, others injurious and calculated to impair the digestive organs. In the opinion of all practitioners who have made gout their special study, the only active and at the same time perfectly harmless treatment is by a course of mineral waters. The water of the Contrexéville-Pavillon springs admirably fulfils the conditions as to triple elimination; by the kidneys first, secondly through the intestines, and finally through the skin, whose secretory activity may be increased by rubbing preceded by rapid washing. The complete classic alimentary hygiene should accompany and complete this simple and rational treatment, which for 150 years has been used in France with never-failing success.

In order to obtain the maximum benefit from the treatment, we would recommend sufferers who cannot take the cure at Contrexèville in France—where of course it is more efficacious than at home—to drink the water three times a year, in March, June and October. Each of these cures should consist of twenty bottles, taken in the following manner: one every morning for twenty successive days, each bottle being divided into four glasses, which are drunk before breakfast, at intervals of half an hour, with an interval of one hour between the last glass and the breakfast. It is also well to mix a certain quantity of Contrexéville-Pavillon water with the liquid usually drunk at meals—wine, whisky, etc.

SELECTED.

DEPARTMENT OF MEDICINE.

UNDER THE CHARGE OF DRS. F. D. AND ROSE T. BULLARD.

TUBERCULAR INFECTION IN STREET CARS. (*Boston Med. and Surg. Journal.*) Dr. William G. Bissell calls attention to the danger of tubercular infection in street cars, in the August number of the Buffalo *Med. and Surg. Jour.* His article is illustrated by a micro-photograph showing hundreds of tubercle bacilli from a sample of dust taken from a street car in Buffalo. The great danger from the drying and dissemination as dust of the sputum so freely distributed over the floors of street cars, especially in open cars where smoking is allowed, is a matter well worth legislative attention. When we consider the fact that these bacilli in the dried state maintain their virulence for years, we can appreciate the danger from this source. The education of the public with regard to the danger of indiscriminate expectoration is not enough; spitting in street cars and public buildings should be prohibited by city ordinance.

BETTER THAN CANNON BALLS FOR CONSTIPATION. (*Boston Med. and Surg. Journal.*) Douglas Graham, M.D., Boston. Some years ago, Dr. Sahli, of Berne, advised many of his patients suffering from torpid bowels to roll a five-pound cannon ball over their abdomens for five or ten minutes every morning before rising, and in this way a number were cured of constipation.

A much more effectual mechanical means, and one which patients can use themselves, is to percuss and pound their own abdomens for a few minutes, morning and evening, with the inner border of their fists. It is well to do this in the direction of the ascending, transverse and descending colon. Alternating with percussion, friction and deep kneading may also be used. To show what a patient can do for himself, a case is narrated: Patient, with neurotic parentage, in poor health, suffering from dyspepsia, sluggish bowels, etc. Bowels had not moved for fifteen days. Copious injections had no effect. He was in hospital ten weeks and had croton oil seven times, which caused six dejections of small, hard lumps, accom-

panied with much pain. His stomach would retain nothing but crackers and water. He was advised, on leaving the hospital, to report every few days, for the propriety of opening abdomen was being seriously considered. As he was an old friend of mine, when I met him a fortnight later, he told me what I have just narrated, and I volunteered to give him a practical lesson in percussing, rubbing and kneading his abdomen, although with little hope that it would be of any use. However, seven weeks later, he called looking like another man, said he could walk twelve miles with ease, that his bowels had moved regularly every other day after he had percussed them for a week, and five weeks after he was eating freely of generous mixed diet without dyspepsia. He has since continued well. In the hospital he had vigorous massage of the abdomen for fifteen minutes every morning. It was probably *so vigorous* that it missed its aim by causing the muscles of the abdomen to contract so strongly that the impression did not reach the intestines at all.

ETHER FOR ANESTHESIA IN MUNICH. (*Munchener Med. Wochenschr. Therapeutic Gazette.*) P. Zeigler says ether has been used at the surgical clinic in Munich since May 1, 1893. The experience in six hundred cases is now made public. * * * In conclusion, the unpleasant sensation of suffocating at the beginning, the cyanosis, the excessive secretion of mucus and saliva, the tardy relaxation so common in alcoholics, the frequent partial return to consciousness when the cone is removed, are annoying, but can be obviated by greater experience. Over against these is the diminished danger, since cardiac syncope is not primary but secondary to respiratory syncope, which can be more easily overcome. Ether is not recommended for operations on the face, and is directly contra-indicated in all diseases of the air passages, including compression of the trachea. He declares himself in favor of the use of ether, and the latest statistics justify him, for one death has resulted in nineteen hundred cases of chloroform anesthesia, while with ether one death in twenty-six thousand cases.

SHOULD ALCOHOL BE USED IN THE TREATMENT OF DISEASE? (*Jour. Amer. Med. Assn., Sept.*) H. D. Didama, M.D., Syracuse, N. Y. Observations in bygone days and accurate recent experiments seem to establish the following statements beyond successful contradiction: 1. Alcohol is not a food. 2. Does not promote digestion. 3. Does cause gastric disturbances. 4. Alcohol does not increase muscular strength nor promote physical or mental endurance.

The prevailing opinion of the great majority of wise and otherwise physicians is that alcohol is a stimulant; that it gives strength to a flagging heart; that its use is eminently proper in pneumonia and typhoid fever, when the pulse is weak, and that, in these and all other diseases, the amount administered should constantly increase as the pulse grows weaker; and also that in diphtheria heroic doses are not only justifiable but almost omnipotent in rescuing the patient from the jaws of death. Recent and carefully conducted experiments made by competent scientists of world-wide reputation seem to demonstrate that alcohol should be classed with ether and chloroform as an anesthetic, rather than as a stimulant. Dr. H. C. Wood emphatically advises: "In accidents during anesthesia, avoid the use of all drugs except strychnia, digitalis and ammonia, * * * and remember that some, perhaps many, of the deaths which have been set down as due to chloroform and ether, have been produced by the alcohol which has been given for the relief of the patient."

Prof. N. S. Davis, after an entire disuse of alcohol personally and in practice for forty years, unhesitatingly declares that it is an anesthetic and not a stimulant; that as a result of this property it makes the one who uses it feel warmer when he is cold and cooler when he is warm without altering his temperature; that it makes

him less sensitive to pain; that in collapse and shock and failing pulse, it does not afford relief; that when given with strychnine and digitalis, the stimulating effect is always from the latter; and that wine and beer are diluted poisons, never necessary, never advisable.

The free use of alcohol in the treatment of diphtheria, throughout Europe and in some American cities, has been almost universal. The mortality, according to reported statistics, has been appalling. Curiously enough, in the last report from abroad furnished by Dr. Rabot, of Lyons, the success of antitoxin in curing and preventing the dreadful disease is considered by the doctor as specially "brilliant," the mortality in forty-seven cases being but 34 per cent., while in 1893 is was 50 per cent. And the reporter significantly and jubilantly adds: "No alcohol was given."

THE TEMPERANCE MOVEMENT IN FRANCE. (*Med. Record, N. Y. Polyclinic.*) For some time past, French medical writers have been urging the necessity for a resolute stand being made against the ravages of alcoholism. Many of the leading medical journals have inveighed in the strongest language agains the heavy mortality from alcohol, compared to which that from cholera is declared to be absolutely benign. In little less than half a century, since 1850, the consumption of alcohol has quadrupled in France, averaging in 1894 four litres per head. Dr. Legrain, physician to the insane asylums in the department of the Seine, has made an extended study of alcoholic heredity, from which he formulates the following conclusions: 1. Double parental alcoholism creates an irresistible tendency to drinking in the children. 2. Parental absinthism seems to transmit epilepsy directly to the offspring. 3. The parental combination of absinthe drinking and epilepsy is a common cause of epilepsy in children. Dr. Moreau de Tours says that even children, in certain parts of France, drink large quantities of brandy on holidays. Dr. Roubinovitch, of St. Anne's Asylum, has begun to lecture on drunkenness to teachers and pupils in the schools of his neighborhood, and many other medical men have engaged in the new crusade against intemperance. A French temperance society has been recently formed, the members of which do not pledge themselves to teetotalism, but simply to abstinence from spirits and strict moderation in wines, malt liquors and cider.

DEPARTMENT OF SURGERY.

UNDER THE CHARGE OF JOS. KURTZ, M. D., PROFESSOR OF CLINICAL SURGERY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA, AND CARL KURTZ, M. D.

TENDON GRAFTING: A NEW OPERATION FOR DEFORMITIES FOLLOWING INFANTILE PARALYSIS WITH A REPORT OF A SUCCESSFUL CASE.—(*Author's Abstract.*) By Samuel E. Milliken, M. D. New York. Surgeon-in-Chief of the N. Y. Infirmary for crippled children, surgeon to the Infants' and Children's hospitals.

At the meeting of the N. Y. State Med. Ass'n, Oct. 15, 1895, (Med. Rec. Oct. 26,) Dr. Milliken presented a boy, 11 years of age, upon whom 20 months before he had successfully grafted part of the extensor tendon of the great toe into the tendon of the tibialis anticus muscle, the latter having been paralyzed since the child was 18 months old.

The case which was presented showed the advantages of only taking part of the tendon of a healthy muscle which was made to carry on the function of its paralyzed associate, without in any way interfering with its own work. The brace which had been worn since two years of age was left off, the patient walked with-

out a limp, the talipes valgus was entirely corrected and the boy had become quite an expert on roller skates.

Dr. Milliken predicts a great field for Tendon Grafting in these otherwise hopeless cases of infantile paralysis, who heretofore have been doomed to the wearing of braces all their lives.

EYE, EAR, NOSE AND THROAT.

UNDER THE DIRECTION OF W. D. BABCOCK, A.M., M.D., PROFESSOR OF DISEASES OF THE NOSE AND THROAT, COLLEGE OF MEDICINE OF THE UNIVERSITY OF SOUTHERN CALIFORNIA.

LARYNGEAL PHTHISIS, SURGICAL TREATMENT.—(*Med. Jour.*, Oct., '95.) Gleitzman. Surgical treatment is followed by relief of pain; there is ease of swallowing food, improvement of voice, cough and respiration.

The indications for curettement are :

1. In cases of primary tuberculous affections without pulmonary complications.

2. In cases of concomitant lung disease which is either in the incipient stage or has at least not progressed to softening and hectic conditions.

3. It is best adapted for circumscribed ulcerations and infiltrations of the larynx especially.

4. For the dense, hard swelling of the arytenoid region, the ventricular band, the posterior wall, for tuberculous tumors, and for the affections of the epiglottis.

5. In advanced lung disease with distressing dysphagia resulting from infiltration of the arytenoids, curettement is justifiable as the quickest means to give relief.

Contraindications are:

1. Advanced pulmonary disease and hectic.

2. Disseminated tuberculous disease of the larynx, leaving little or no area of healthy tissue.

3. Extensive infiltration producing severe stenosis when tracheotomy is indicated.

DEAFNESS, CHRONIC CATARRHAL AND SUPPURATIVE; TREATMENT, NEW OPERATION FOR—(*Med. Rec.*, Nov., '95.) Shastid incises the drum membrane with a lance knife just anterior and parallel to the handle of the malleus, making a cut from two and a half to three millimetres in length; then inserts a small bent blunt hook and pulls on the handle of the malleus with three or four quick, but rather gentle pulls. If no improvement follows at once, the pulling is repeated, using a little more force. He does not recommend it as a matter of routine, but for those cases that the other recognized measures do not relieve.

TRACHEA TUBE SUBSTITUTE.—(*Med. Rec.*, Oct. '95.) McCartney. Stove pipe wire will do or better the stiffer tinned wire from the stub of a broom, or from the stylet of an English catheter. A probe from your pocket case, or a hair pin may be bent properly, any straight piece of wire or even a crooked piece. Bend the wire in the shape of a wish bone. Give a turn in the center or joint of the wish bone around a lead pencil or any round object to give necessary spring. Bring the sides parallel. Bend the ends of wire to form brood fenestrated blades or loops.

HICCOUGH.—(*Lancet*, Aug. 24.) Leonordt after giving report of cases and treatment, says, it will appear, that pilocarpine, epigastric compression, mor-

phine and chloroform are the mainstay of several able practitioners in the treatment of this disorder. It is of shorter duration in old men than in young women.

"INSOLATION" OF THE EYES, TREATMENT.—(*Jour. de Med.*, Bordeaux.) Sous. Strych Sulph .75, to water, 150 grains; four drops injected every day, using a different temporal region each day. Sight rapidly comes back and in one case was restored in eight days.

ASTHENOPIA, CAUSED BY GOLD SPECTACLES.—(*Med. Rec.*, Oct., '95.) Bates. The doctor reports four cases of asthenopia caused by the parties wearing gold frames. (I would mention also two cases from same cause. B.)

OBSTETRICS AND GYNECOLOGY.

UNDER THE CHARGE OF WALTER LINDLEY, M.D., PROFESSOR OF GYNECOLOGY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA.

EARLY DIAGNOSIS OF CANCER OF THE CERVIX UTERI.—(*Medical Chronicle*, September, 1895.) Dr. W. J. Sinclair, of Manchester, in a paper upon this subject, stated that if, in any given case under examination, the results obtained by palpation and the closest inspection are such as to leave any doubt in the mind of the practitioner as to whether the condition is or is not early cancer of the cervix, the doubt will be invariably cleared up by ascertaining the amount of friability of the tissues. If the suspected portion be thoroughly exposed by a suitable speculum, and the uterus held steady by the volsella, if the disease be malignant a firm scrape with a sharp curette or spoon will enable the examiner to obtain a definite, distinct piece of tissue, larger or smaller according to the extent of the infiltration and consequent friableness of the tissue thus operated upon. If it be not malignant, the firm scrape with the sharp curette will only make the parts bleed, and, at the most, some small thin shred or pellicle of semi-translucent epithelium or of granulation will be obtained. The difference was strikingly brought out by the speaker by comparing the effects thus produced upon a case of old chronic cervical catarrh with hypertrophy, ectropium, and retention-cysts, with the effects produced by similar forcible application of the spoon to the tissues in the early stage of epithelioma. The existence of this contrast, with its easy application to diagnosis, is of the greatest importance in general practice, inasmuch as chronic cervical catarrh, complicated with the other tissue changes just mentioned, is almost the only condition met with which is at all likely to be mistaken for early epithelioma of the cervix. In the case of malignant disease the ring of the external os is complete, and the diagnosis by simple inspection would have to depend upon a mere shade, an indescribable difference in the color of the mucous lining and of the discharge at the os in the two cases respectively. A comparison between the results obtained by palpation would not have brought us anything further toward the completion of a differential diagnosis. In both cases there was a certain element of hardness, unevenness, and irregularity in the consistency of the tissues about the external os; in both there appeared to be some hypertrophy of the cervix, but there was nothing as far as touch was concerned, that would justify one in saying that one case was malignant and the other was not. From certain facts in the clinical history of the malignant case the nature of the disease was suspected and the test of the sharp curette was applied. The instrument cut through from inside the os downward to the vaginal surface of the portio as through a piece of moist cheese, and,

although a microscopical examination of the tissues was made, the diagnosis was completed by the effects of the curette, taken in conjunction with the other clinical facts, quite independently of the histology. On extirpation of the uterus there was found to be extensive breaking down of the tissues of the cervix uteri, extending even above the internal os.

LACERATION OF THE CERVIX AS A CAUSE OF CANCER.—(*American Gynecological and Obstetrical Journal*, September, 1895.) Cancer of the cervix is known to be intimately connected with the bearing of children or with miscarriages, and if the cancer is recognized before it has obliterated all the ordinary landmarks, there is frequently noticed more or less laceration of the cervix associated with it. It seems more than probable, therefore, that in the lacerated cervix, with infiltration and eversion of the lips, exists a direct prolific cause of cancer. In view of this probability, Dr. Howard Kelly makes the following suggestions: (1) Within two or three months after each confinement, every woman should submit to a careful examination, and the exact condition of the cervix should be noted, particularly as to laceration, infiltration, and eversion of the lips. If the laceration exists, the condition should be treated either by puncture and depletory packs, or else the lips should be freshened up and the laceration should be united by means of sutures. (2) Every woman with a deeply lacerated and enlarged cervix, should be operated upon. (3) Every woman with a family history of cancer who presents a laceration of the cervix, no matter of how slight a grade, should present herself to a competent physician about every six months, in order that the cervix may be carefully inspected. (4) Every woman over 33 years of age, who has borne a child at any time during her life, should be advised to submit to an examination, and should be guided by the physician's statements about the condition of the cervix, as to whether it is advisable for her, even in the absence of symptoms, to present herself at stated intervals in the future for further examination.

TREATMENT OF PRURITUS.—(*The Universal Medical Journal*, October, 1895.) Prof. McCall Anderson, of Glasgow, enumerated the nervous elements participating in pruritus as follows: The terminal ramifications of the cutaneous nerves in the epidermis; the small groups of cells communicating with the nerve-filaments and situated in the deep layers of the derm; and, finally, the hairs, which being, properly considered, organs of touch, may cause pruritus by irritation of their follicles. It is difficult to say why pruritus manifests itself in some cutaneous affections and not in others, or why the early manifestations of syphilis are not pruriginous, while the later cutaneous lesions of the disease are distinctly so. Among the most important etiological factors are senility, icterus, gout, digestive disturbances, diabetes, seasonal influences, and nervous and psychical disorders. Without denying the rôle of reflex irritations, Dr Anderson expressed the belief that, in most cases, the itching sensation is due to direct irritation of the nerve-endings in the epidermis.

Treatment should be directed against the supposed cause of the affection, and, should it fail, empirical measures may be tried. Local applications are of but secondary importance, internal medication being usually more efficacious. Among these the best is gelsemium sempervirens, tincture of cannabis Indica, carbolic acid, and, especially, atropine hypodermatically, as well as antipyrin and phenacetin in progressively increasing doses. Electrotherapy also gives good results. In debilitated subjects tonics, such as phosphorus, arsenic and strychnine, are also indicated.

Dr. Myrtle, of Harrowgate, called attention to the difficulty of treating the disease, owing to the individual peculiarities of the patients. Remedies found

useful in one case are injurious in another exactly similar. The best drugs in his hands have been the coal-tar derivatives and chloral. In severe cases applications of a 3 or 6 per cent. solution of caustic potash to the affected parts give considerable relief.

Dr. Waldo, of Bristol, stated that a blister applied over the spine, on a level with the affected region, often gave good results, while in the pruritus due to osteo-arthritic affections sodium salicylate internally was beneficial.

Dr. Stopford Taylor, of Liverpool, placed little faith in internal medication, but recommended hygienic measures, proper food, and physical exercise. Frequent change of linen and alcoholic lotions are serviceable in the anal pruritus of bicyclists.

Dr. Barendt, of Liverpool, reported good results from the application of 2 per cent. carbolized olive oil to the affected parts for about five minutes at a time.

CORRESPONDENCE.

LICENTIATES OF THE CALIFORNIA STATE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners of the Medical Society of the State of California, held Nov. 5, 1895, the following were granted certificates to practice medicine in this State.

ARBERRY, JOHN J., 4146, San Francisco, Med. Dept. Univ. Louisville, Ky., Mar. 3, 1891.
BAKER, CLARENCE C., 4147, Livermore, Kentucky School of Med., Ky., June 30, 1895.
BARBAT, WILLIAM B. F., 4148, San Francisco, Med. Dep. Univ. California, July 13, 1895.
BOYES, WM. J. R., 4149, Oakland, Med. Dept. Univ. California, July 13, 1895.
CAMPBELL THOMAS F., 4150, Los Angeles, Trinity Univ. and Trinity Med. Coll., Canada, Apr. 13, 1886.
DEANE, LOUIS C., 4151, San Francisco, Cooper Med. Coll. Col., Dec. 4, 1891.
DRAKE, MARTIN E., 4152, Gold Hill, Or., Jefferson Med. Coll., Pa., Apr. 2, 1890.
EASTON, DANIEL, E. F., 4153, San Francisco, Med. Dept. Univ. California, July 13, 1895.
FOX, WILLARD H., 4154, Los Angeles, Albany Med. Coll., N. Y., Mar. 15, 1888.
GATCHELL, ELLA F., 4155, Chico, Coll. Phys. and Surg., Boston, Mass., Apr. 18, 1889.
JENISON, MINOT G., 4156, Porterville, Howard Univ., Washington, D. C., Mar. 7, 1882.
JENNINGS, CHARLES R., 4157, Marilla, N. Y., Baltimore Univ. School of Med., Md., Mar. 25, 1890.
KEARNS, FRANCES, 4158, Pasadena, Womans Hosp. Med. Coll., Ill., Mar. 30, 1891.
KIRKWOOD, JAY W., 4159, Los Angeles, Med. Dept. Univ. California, Nov. 1, 1876.
KLINE, WILLIAM J., 4160, Los Angeles, Missouri Med. Coll., Mo., Mar. 2, 1872.
MARSH, JEFFERSON E, 4161, Los Gatos, Rush Med. Coll., Ill., Feb. 21, 1882.
MCARTHUR, W. T., 4162, Los Angeles, Med. Dept. Univ., Toronto, Canada, June 11, 1895.
OFFICER, WM. B., 4163, Eagle Point, Or., St. Louis Coll. Phys. and Surg., Mo., Mar. 28, 1893.
PINGREE, CYNTHIA E., 4164, Chico, Coll. Phys. and Surg., Boston, Mass., Apr. 16, 1890.
TUTHILL, ALEX M., 4165, Los Angeles, School of Med. Univ. Southern Cal., June 5, 1895.
WALTERS, JAMES E., 4166, Los Angeles, Med. Dept. Univ. Michigan, June 26, 1884.
WILSON, ALEXANDER L., 4167, Tulara, Missouri Med. Coll., Mo., Mar. 4, 1884.

REFUSED.

Oct. 1st. T. J. MURPHY, David City, Neb., School not recognized.
Nov. 5th. R. W. REMWICK, for Unprofessional Conduct.

CHAS. C. WADSWORTH, Secretary, 518 Sutter Street, San Francisco.

VIEWS AT JACKSON'S NAPA SODA SPRINGS—The Home of Napa Soda Mineral Water.

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Communications are invited from physicians everywhere; especially from physicians of the Pacific Coast, and more especially from physicians of Southern California and Arizona.

EDITORIAL.

MEDICAL SKEPTICISM.

That medical skepticism exists, and always has existed within the profession goes without saying. That it is widespread or deep, a somewhat extended observation does not warrant.

That there are causes in justification may not be denied; that it will wholly disappear can never be, unless medicine may be reduced to an exact science, and idiosyncrasies vanish from the human intellect. That it may be lessened there can be no question, and that it will be, in proportion to the enlargement of the area of exact observation in the several fields of medical research, is certain. That it is a misfortune will not be denied, nor that the individual skeptic is handicapped in proportion to the extent and tenacity of his doubt.

We are quite sure that an innate materialistic mental trend which discredits the invisible and intangible is largely responsible for the most marked individual cases. But such are exceptional. Paradoxical as it may seem, personal habits of belief may develop a bias or

unbelief as positive and as obstinate as an innate skeptical trend. Doubtless the fixation of personal habits of belief has had much to do in the past in crystallizing the conservatism of practitioners beyond the age of forty. We say *in the past* because men are younger now at forty, that is more flexible mentally than in the days of Hunter and of Jenner. With increased facilities for investigation, have come better opportunities of demonstration which constitutes the most satisfactory of all evidence.

The generation period just closing has been the most fruitful in accurate research in the entire history of medicine. At its very beginning* Prof. Salisbury, of Ohio, demonstrated to his own satisfaction, at least, that the *algoid palmellae* constituted the cause of malarial fevers. A year later, Prof. Schmidt,** of Louisiana, announced his discovery of the cause of Yellow Fever in a nameless fungus, which he described with conscientious accuracy. These gentlemen by faithful work had already attained to eminence as microscopists. A year later,*** Prof. H. C. Wood, Jr., of Pennsylvania, while not disputing what they saw, at once demolished their logic and their conclusions. Later on Koch announced the discovery of the bacillus tuberculosis, and Schmidt, to his own satisfaction, declared the patient painstaking Berliner in error as to what he saw. Multitudes of observers have since confirmed the correctness of Koch's description, although his deductions are even yet disputed or viewed askance by an exceptional doubter.

Toward the close of our period Laveran with lens and logic announces the *plasmodium* as the responsible causative agent of the *mal aria* of the fathers. And now, before the historic volume is shut, comes Dr. Moser, Pathologist to St. Catherine's Hospital in Brooklyn, in an illustrated article**** in which he demonstrates peculiar changes in the blood corpuscles which might readily be mistaken for extraneous substances. Of the peculiar bodies discovered within the cells he says, "I regard them as degenerative products and not a parasite." "In fact when we compare these bodies with what has been described as the *plasmodium malariae*, and when we consider how actively mobile are some of these cells, and how altered their appearance may become, there may be a suspicion that the life-history of the cell has been confounded with that of a parasite."

Recurring to Prof. H. C. Wood's criticism of Professors Salisbury and Schmidt, we quote, "In conclusion perhaps it is allowable to state that some two or three years since, the writer of this paper very

*The American Journal of the Medical Science, Jan., 1866.
**The Southern Journal of the Medical Science, Nov. 1867.
***The American Journal of the Medical Sciences, Oct., 1868.
****The Medical Record, Nov. 2nd, 1895.

strongly inclined to believe in the doctrine of animate contagion, having imbibed it during his student life, and that this essay has not been the result solely of studies especially undertaken for the purpose; but that during the prosecution of other microscopic investigations, the evidence so gathered itself in his mind as to lead him into this by-path, and to leave with him no doubt that general diseases are not caused by organic entities. There is a vast accumulation of negative evidence which repudiates the doctrine of animate contagion, either as taught by Linnaeus, or by more recent authorities. There are no known facts establishing the doctrine; there are many such which strongly support the negative proposition.'' This extract sounds very like a voice from the remote past; but it was projected within the professional lifetime of many of our readers by one of our most competent and accurate observers, who to-day doubtless would like to have it buried out of sight.

Despite the apparent contradictions of investigators of acknowledged ability, their search has been in the direction of the truth. And each truth demonstrated and confirmed reduces by so much the tenable area of unbelief.

At the beginning of this generation-period there existed an illy concealed skepticism in regard to conventional therapeutic measures. Crude remedies, and heroic doses, with uncertain diagnosis threatened seriously to transfer the treatment of disease to the advocates of water, or of sugar, or of both. Hospital physicians began anew to study their patients, rather than to medicate them, and thus the tea treatment of pneumonia, the milk treatment of typhoid fever, the rest treatment of acute rheumatism, etc., etc., led to a recognition of the self-limitation of many pathic manifestations, and so by vigilant conservatism cleared the way wherever possible for auto-recovery. Subsequent labors of skilled pathologists prepared the ground for accurate diagnosis, and the intelligent application of remedial agents.

Chemists by the production of the alkaloids and alkaloidal salts enlarged the list from which to choose, removing the mass of crudity that hitherto had provided only serious grounds for complaint, and but little for hope. Milner Fothergill, in England, did much to develop and confirm confidence in the virtue of selected remedies. While in this country, Roberts Bartholow more than any other, by his positive statements based upon careful and extended observation arrested the attention of thinking medical men to the undoubted value of the modern materia medica.

Aside from mental make up, inherited or acquired, skepticism may be readily traceable to a recoil from the whole adoption of half truths,

whether it be Hahnemann's similars, Thompson's evacuants, Bergeon's inflation, Koch's hypodermatic tuberculin, or what not.

It arises too from a cumbrous pharmacopœia, and a more cumbrous unofficial drug list, crowding the advertising pages of reputable medical journals with improbable assertions, creeping or rather stalking boldly into space supposed to be reserved for scientific reading matter, after receiving in addition editorial endorsement based upon the use of the customary physician's sample, and with no knowledge of its actual composition. Remedies for medical skepticism are not furnished by the advertisers. We venture to suggest where they may be found:—In the avoidance of haste on the part of competent observers in announcing discoveries; the acceptance of such announcements by the profession as final, only after authentic confirmation by other observers equally proficient; in an intimate acquaintance with post-mortem pathological conditions; in a constant and careful clinical study of selected cases; in an individual reduction of the materia medica to a practical working basis, making possible a thorough acquaintance with every action of the remedies used; and lastly by the maintenance of a readiness to recognize and admit one's fallibility and the possibility of learning something worth knowing from some, body that knows less than he does.

SOUTHERN CALIFORNIA MEDICAL SOCIETY.

The programs are out for the Sixteenth Regular Semi-Annual Meeting of the Southern California Medical Society, to be held in Los Angeles, at the parlors of the Westminster Hotel, Dec. 4th and 5th. An unusually interesting session is promised and a full attendance is desired. Make it what its name indicates, a *Southern California Society*, and not a local organization.

EDITORIAL NOTES.

Dr. Orr, of Chino, has located at North Ontario.

Dr. C. M. Haviland has located in Santa Barbara.

Dr. Geo. J. Engelmann has removed from St. Louis to Boston, Mass.

Dr. Wm. H. Craig, of Glendora, has opened an office in North Ontario.

Dr. G. E. Reynolds has gone to Arizona from California, locating at Prescott.

Dr. J. Lee Hagadorn, lately of Fullerton, has come to Los Angeles, and has his office at 147 S. Main street.

Dr. A. J. T. Royles has decided to locate in Woodland, Cal., occupying the office of Dr. Chas. E. Beebe, who contemplates a removal to Watsonville.

The *American Journal of Surgery and Gynecology* has been removed to St. Louis, from which place the December number (Vol. VIII, No. 1) is just issued. Dr. Emory Lanphear, Professor of Surgery in the Womans Medical College, has been appointed editor in chief.

A New exchange is welcomed this month, *Pediatrics*, an illustrated semi-monthly, devoted to the diseases of children. Too much attention cannot be given to this department of medicine. The editorial staff including men of great prominence is a guarantee of its high standing.

At the last meeting of The Tri-State Medical Society (of Iowa, Illinois and Missouri) the following officers were elected: President, Dr. Robt. H. Babcock, Chicago; first vice-president, Dr. A. H. Cordier, Kansas City; second vice-president, Dr. W. A. Todd, Charlton, Ia.; treasurer, Dr. C. S. Chase, Waterloo, Ia.; secretary, Dr. G. W. Cale, St. Louis. The next meeting will be held in Chicago the first Tuesday, Wednesday and Thursday, in April, 1896.

The San Francisco Medical Society at its last meeting, elected the following officers: President, Dr. W. F. Cheney; first vice-president, Dr. J. H. Barbat; second vice-president, Dr. F. B. Carpenter; recording secretary, Dr. A. P. Woodward; assistant recording secretary, Dr. Lucy M. F. Wanzer, corresponding secretary, Dr. Lucy M. F. Wanzer; treasurer, Dr. W. S. Whitwell; librarian and curator, Dr. D. W. Montgomery; trustees, Dr. Henry Gibson, Jr., Dr. W. F. McNutt and Dr. James Simpson.

The Pasadena Medical Society held its last meeting in Dr. Rowlands office with a large attendance of physicians, and listened to an admirable paper on "The Relation of Chemistry to Medicine," by Dr. Briggs. His conclusion that the profession is wisely leaving behind the once prevalent custom of mixing many ingredients in prescriptions, and that more dependence is being placed upon specific drugs for specific diseases, was generally agreed to in the discussion that followed. The society received as a member Dr. Mary Hagadorn. At the next monthly meeting officers will be elected.

How we intend to check substitution of drugs. Owing to the fact that substitution of drugs is practiced to a great extent, we earnestly request our readers to assist us in reporting to us all cases in which they may have been the victims of this criminal offense, giving the name and address of imposoters, also all particulars to substantiate their statement, such as sworn affidavit, etc.

We will expose in our columns the names of fraudulent dealers on receipt of satisfactory evidence.

All our readers will admit, that a doctor who prescribes a certain remedy expects that his prescription shall be filled accordingly. A druggist has no right whatever to use his own judgment in the matter, otherwise he places the reputation of the physician as well as the life of his patient in jeopardy.

Feeling that all doctors, honest druggists, and manufacturers of legitimate preparations will be benefited by our action in this matter, we solicit their assistance.

The above notice must be considered as a warning to druggists who believe that they are at liberty to substitute drugs.

PAMPHLETS RECEIVED.

CIVIL SERVICE REFORM IN STATE INSTITUTIONS—REORGANIZATION OF THE MEDICAL STAFF. By BOERNE BETTMAN, M.D., Professor of Ophthal. in Coll. Phys. and Surg. Chicago. Reprint from Amer. Med. Assoc. June 29, 1895.

SERO-THERPY AND ACCESSORY TREATMENTS OF TUBERCULOSIS. By PAUL PAQUIN, St. Louis. Reprint from The Medical Fortnightly, May 15, 1895.

ANNUAL ADDRESS DELIVERED AT MEDICAL SOCIETY OF THE STATE OF CALIFORNIA IN SAN FRANCISCO, APRIL, 1895. By G. L. SIMMONS, M.D., President, Sacramento, Cal.

ASEPTIC PROPHYLXIS OF ASIATIC CHOLERA; ARSENIZATION. By R. B. LEACH, M.D., Member Amer. Public Health Assoc., Paris, Texas.

REPORT OF SEVEN CASES OF DOUBLE CASTRATION FOR RELIEF OF ENLARGED PROSTATE GLAND. By H. O. WALKER, M.D., Detroit, Mich. Reprint from N. Y. Med. Journal, April 20, 1895.

CAMPHOR-MENTHOL; A SUPPLEMENTARY REPORT. By SETH SCOTT BISHOP, M.D., Surgeon to Ill. Eye, and Ear Infirmary, Prof. of Dis. of Nose, Throat and Ear, Chicago Summer School of Medicine. Reprint from Jour. Amer. Assoc., May 4, 1895.

GRIP AND ITS EFFECT ON THE NOSE, THROAT AND EAR. By THE SAME. Reprint from Medicine, April, 1895.

IMPROVED DOUBLE REFRACTONS. By THE SAME. Reprint from Chicago Medical Recorder, May, 1895.

SUPRA-PUBIC CYSTOTOMY FOR CALCULUS OF THE BLADDER. By A. H. MEISENBACH, M.D., Prof. of Surgery, Marion Sims Medical College, St. Louis. Reprint from Jour. Amer. Med. Assoc., Dec. 22, 1894.

SANITARY CLIMATOLOGY, Circular No. 4. Information relative to the investigation of the influence of Climate on health.

TWO CASES OF PSEUDO-HYPERTROPHIC PARALYSIS IN BROTHERS. By ARCHIBALD CHURCH, M.D. Professor of Mental Diseases, Chicago Medical College, etc. Reprint from International Clinics, Vol. I. Fifth Series.

BOOK REVIEWS.

PRACTICAL DIETETICS with Special Reference to Diet in Disease by W. Gilman Thompson, M. D., Professor of Materia Medica, Therapeutics and Clinical Medicine in the University of the City of New York, visiting physician to the Presbyterian and Bellevue Hospitals. New York. D. Appleton and Company.

This is a work for which there is a practical need. It is not a book like any-

thing else, it fills a place of its own and in its place is an important one, too. Of course the subject of dietetics has received attention in a thousand volumes—but only as an after-thought, everything else is ably discussed first and then a very few general remarks on diet are added. This mistake is true both of college instruction and treatises on medicine. This work is devoted exclusively to foods, their practical preparation and therapeutic application. It contains 800 pages and handles the subject exhaustively and in a common sense manner. The following are the headings for the different parts :

I. Foods and food preparations—including such topics as elementary composition, classification, force production, economic value, and classes of foods, water, salts, animal and vegetable food stuffs ; their different preparations, digestibility, adulteration, etc.

II. Stimulants, beverages and condiments ; physiological action, clinical uses and different preparations.

III. Cooking, food preparation and preservation, and quantity of food required.

IV. Food required for special conditions according to age, weight, sex, race, heredity, climate and season.

V. Food digestion—conditions which especially affect digestion—hours, appetite, sleep, physiological secretions.

VI. The general relation of food to special diseases, and diseases which are caused by dietetic errors.

VII. Administration of food for the sick—methods.

VIII. Diet in disease, in infectious diseases, in diseases of the respiratory, circulatory, urinary and digestive systems, including those of the liver ; diseases of the nervous system and kidney affections ; and, lastly, diseases especially influenced by diet such as obesity, rheumatism, gout, diabetes, rachitis and scurvy. Also diet in miscellaneous diseases and for surgical patients.

IX. Rations and dietaries.

X. Appendix, receipts for invalid foods and beverages suitable for fevers and convalescence from acute illness.

We have given the general headings of the chapters at length for even the enumeration of its subjects conveys a good idea of the importance and scope of this valuable book.

For all diseases, dietetic management is of prime importance whether it be to conserve energy, spare overworked organs, check unhhealty accumulations, or prevent waste. All physicians admit this importance, but, we fear, too many are not accurate enough in their details. The eating of the proper kind of food prepared in the correct way at appropriate intervals should be as much the duty of the physician to prescribe as it is to give the indicated medicines. Nay; even more imperative is it on him to regulate the food required for metabolism and to prevent waste. Without medicines the patient may live, but without *appropriate* diet they are more likely to die.

Among some of the special things insisted on in typhoid fever is the maintenance as nearly as possible of the normal digestion and absorption of food. Attention is directed to the fact that typhoid germs thrive in *nitrogenous media.* But care has to be taken that constipation and distention do not follow a milk diet—which otherwise is the ideal food for that disease.

THE ARCHIVES OF PEDIATRICS will commence its 13th year with the January number, and under the business management of E. B. Treat, publisher, of New York. The "Archives" has been for twelve years the only journal in the English language devoted exclusively to "Diseases of Children," and has always had

a high standard of excellence. The new management propose several important changes in its make-up; increasing the text fifteen per cent. and enlarging its scope in every way. This will give room for the fuller contributions and additional collaborators who have been secured for the various departments, all of which give promise of a more successful era than has been known even in the already brilliant career of the journal. The editorial management will be in the hands of Floyd M. Crandall, M. D., Adjunct Professor of Pediatrics, New York Polyclinic, and Chairman of Section on Pediatrics, New York Academy of Medicine.

IMPORTANT ANNOUNCEMENT.—Saunders' American Year-Book of Medicine and Surgery, edited by George M. Gould, A.M., M.D., assisted by eminent American physicians and teachers.

Notwithstanding the rapid multiplication of medical and surgical works, still these publications fail to meet fully the requirements of the *general physician*, inasmuch as he feels the need of something more than mere text-books of well-known principles of medical science. Mr. Saunders has long been impressed with this fact, which is confirmed by the unanimity of expression from the profession at large, as indicated by advices from his large corps of canvassers.

This deficiency would best be met by current journalistic literature, but most practitioners have scant access to this almost unlimited source of information, and the busy practiser has but little time to search out in periodicals the many interesting cases, whose study would doubtless be of inestimable value in his practice. Therefore, a work which places before the physician in convenient form *an epitomization of this literature by persons competent to pronounce upon* the value of a discovery or of a method of treatment cannot but command his highest appreciation. It is this critical and judicial function that will be assumed by the editorial staff of the "American Year-Book of Medicine and Surgery."

It is the special purpose of the editor, whose experience peculiarly qualifies him for the preparation of this work, not only to review the contributions to American journals, but also the methods and discoveries reported in the leading medical journals of Europe, thus enlarging the survey and making the work characteristically international. These reviews will not simply be a series of undigested abstracts indiscriminately run together, nor will they be retrospective of "news" *one or two years old*, but the treatment presented will be *synthetic* and *dogmatic*, and will include only what is new. Moreover, through expert condensation by experienced writers, these discussions will be comprised in a single volume.

The work will be replete with original and selected illustrations skilfully reproduced, for the most part, in Mr. Saunders' own studios established for the purpose. thus insuring accuracy in delineation, affording efficient aids to a right comprehension of the text, and adding to the attractiveness of the volume. W. B, Saunders, Publisher, 925 Walnut Street, Philadelphia.

THE OVERLAND MONTHLY for November opens with a bright talk by the Editor, "In the Sanctum," on the Circus and the memories it brings. U. S. Senator William M. Stewart tells again in cogent style why he thinks "Gold not Necessary for Foreign Trade." This is followed by a charming little Indian story, "Yat," by Elwyn Irving Hoffman, which is illustrated by one of Dixon's vigorous sketches. Mr. Rounsevelle Wildman, the Editor, has been "Among the Redwoods," and tells about it in a picturesque article profusely illustrated from beautiful photographs. Horace Annesley Vachell's story, "The Quicksands of

Pactolus," increases in interest as it goes on its way, giving a most graphic view of San Francisco society. S. S. Boynton contributes an interesting paper on "Early California Schools," full of personal reminiscences of an era now pretty thoroughly passed away, and Professor Stewart Culin describes, with many illustrations, the curious transformations that the game of Dominoes has undergone in China, Korea, and in many other places even up to the land of the Eskimos. There are poems, editorials, reviews, and the usual departments, making up a varied and strong number. Californians in choosing their periodical lists for the coming year cannot in reason neglect the OVERLAND, and multitudes of Eastern people will want this able exponent of the wide, free, and interesting life of the Farthest West.

THE October (1895) number of THE ALIENIST AND NEUROLOGIST contains "The Progress of Lunacy," by Forbes Winslow, M. D.; "Medical Lore in the Older English Dramatists and Poets (Exclusive of Shakespeare)," by Robert Fletcher, M. D.; "Hypnotism and the Law," by Clark Bell, Esq., of the New York Bar; "Is the Race Degenerating? A Critique of Nordau's Theory," by Jas. G. Kiernan, M. D.; Discussion on Dr. Kiernan's Paper," by H. S. Bannister, M. D, and E. S. Talbot, M. D.; "The Colored Insane," by J. W. Babcock, M. D.; "Abnormal Brain Convolutions," by W. Julius Mickle, M. D.; "Hysterical Deafness and Aphasia in a Male Patient—Excessive Masturbation in a Girl of Seven Years," by Emory Lanphear, M. D., Ph. D.; together with the usual selections, editorials, reviews, hospital notes, book notices, etc. Kindly send in your contributions or any items of Neurological or Psychological interest, books for review, etc., for the January, 1896, number to Dr. D. S. Booth, 3857 Olive street, St. Louis. C. H. Hughes, editor, 3857 Olive street, St. Louis, Mo. Subscription, $5.00 per annum. Single copies, $1.50.

In response to numerous requests from physicians for Tongaline in some form more pleasing to the taste and more convenient of administration than the liquid, we now prepare Tongaline in tablets, each 6-grain Tongaline tablet contains:

Concentration of Fluid Tonga, 1 gr.; Sodium Salicylate, 5 grs.; Cimicifugin Salicylate, ⅛ gr.; Pilocarpin Salicylate, 1-200 gr.; Colchicin Salicylate, 1-1000 gr.

It is a recognized fact that the most successful treatment in all cases where salicylic acid or the salicylates are indicated, is secured by the use of the vegetable salicylic acid, that from the pure oil of wintergreen, which is the only salicylic acid used in Tongaline and is made in our own laboratory.

We also make Tongaline and Lithia Tablets: Tongaline, 5 grs.; Lithium Salicylate, 1 gr., especially indicated in rheumatism and neuralgia, where there exists an excess of uric acid.

The Tongaline and Quinine Tablets, Tongaline 3½ grs., Quinia Sulph., 2½ grs., are prepared in order to meet cases of a rheumatic and neuralgic tendency, when complicated with so-called malaria.

Samples mailed free to physicians on application. Mellier Drug Company, St. Louis.

WHEN writing a prescription in which you use glycerine as a vehicle for its solvent, soluble and anti-fermentive properties, the same ends will be gained and your patient materially strenghtened and benefitted by writing Codliver Glycerine instead of simple glycerine.

MONTHLY METEOROLOGICAL SUMMARY.

U. S. WEATHER BUREAU, LOS ANGELES STATION.

Los Angeles, California. *Month of October, 1895.*

Date	TEMPERATURE Max.	Min.	Mean	Precipitation in inches and hundredths
1	80	54	67	0
2	91	56	74	0
3	71	61	66	0
4	77	61	69	T
5	76	58	67	0
6	84	54	69	0
7	76	52	64	0
8	73	58	66	0
9	73	58	66	0
10	72	56	64	0
11	75	54	64	0
12	74	52	63	0
13	85	55	70	0
14	75	54	64	0
15	72	60	66	T
16	72	53	62	0
17	74	46	60	0
18	70	56	63	.20
19	70	56	66	.04
20	74	59	66	0
21	74	56	65	0
22	73	56	64	0
23	76	52	64	0
24	87	54	70	0
25	89	56	72	0
26	74	56	65	0
27	73	56	64	0
28	74	54	64	T
29	70	57	64	0
30	70	50	60	0
31	86	45	66	0

SUMMARY

MONTHLY RANGE OF BAROMETER:

Mean Barometer, 29.96.
Highest barometer, 30.11, date 16.
Lowest barometer, 29.04, date 2.
Mean Temperature, 66°.
Highest temperature 91°, date 2.
Lowest temperature 45°, date 31.
Greatest daily range of temperature 41°, date 31.
Least daily range of temperature 10°, date 3.

MEAN TEMPERATURE FOR THIS MONTH IN

1876	1882. ..... 63°	1889 ..... 66°
1877 ..... 64°	1883..... 62°	1890 ..... 68°
1878 ..... 65°	1884..... 63°	1891 ..... 66°
1879..... 66°	1885 ..... 66°	1892 ..... 64°
1880 ..... 63°	1886..... 60°	1893..... 63°
1881..... 61°	1887..... 66°	1894..... 66°
	1888..... 66°	1895..... 66°

Mean temperature for this month for 17 years, 64°
Total deficiency in temp. during the month, 1°
Total deficiency in temp. since Jan. 1. 271°
Prevailing direction of wind, West.
Total movement of wind, 2305 miles.
Maximum velocity of wind, direction, and date, 14m, W. 24th.
Total Precipitation, 24 inches.
Number of days on which .01 inch or more of precipitation fell, 2.

TOTAL PRECIPITATION FOR THIS MONTH IN

1878 ..... .15	1884..... .39	1890..... .03
1879..... .93	1885..... .30	1891..... .00
1880 ..... .14	1886..... .02	1892..... .33
1881..... .82	1887..... .17	1893..... .75
1882..... .05	1888..... .40	1894..... .02
1883..... 1.42	1889..... 6.96	1895..... .24

Average precip'n for this month for 17 years, .90.
Total deficiency in precip'n during month .65 inches.
Total precip'n from Sept. 1,'95, to date, 24 inches.
Average precip'n from Sept. 1,'95, to date, .96 inches.
Total deficiency from Sept. 1,'95, to date, .72 in.
Average rainfall for 10 wet seasons, 21.58 inches.
Number of clear days, 12.
" partly cloudy days, 18.
" cloudy days, 1.

NOTE—Barometer reduced to sea level. "T" indicates trace of precipitation.

METEOROLOGICAL SUMMARY SOUTHERN CAL., OCTOBER, 1895.

STATIONS	TEMPERATURE Mean	Max.	Min.	Mean Barometer	Relative Humidity	RAINFALL Days	Am't	WEATHER Clear	Fair	Cld'y	WIND Direction	Total Mov't
Los Angeles	66.	91.	45.	29.96	82.	2	.24	12	18	1	W	2,305
San Diego	64.	84.	54.	29.96	78.	2	.27	16	12	3	N W	3,842
Santa Barbara	63.4	87.5	47.5		79.	2	.55	18	8	5	W	2,648
Yuma	76.	99	54.	29.86	50.	3	.15	28	2	1	N E	3,803
Arlington Heights	65.	100.	44.					20	11		W	
Ontario												
Pasadena												
Redlands	65.	89.	46.								W	
San Bernardino	65.	99	38.					18	10	3	W	
Santa Ana	73.	88.	60.								S	

OBSERVERS.—George E. Franklin, U. S. Weather Bureau, Los Angeles; M. L. Hearne, U. S. Weather Bureau, San Diego; Hugh D. Vail, Santa Barbara; A. Ashenberger, U. S. Weather Bureau, Yuma. JAMES A. BARWICK, Director California Weather Service, Sacramento, Cal.

REGISTERED MORTALITY OF LOS ANGELES.

WITH SEX AND NATIVITY OF DECEDENTS.

Estimated Population, 80,000 — *October, 1895*

CAUSE OF DEATH	Total Deaths	Annual rate per 1000	SEX		NATIVITY				RACE		
			Male	Female	Los Angeles	Pacific Coast	Atlantic States	Foreign Born	Caucasian	African	Mongol
Deaths from all causes	84	12.60	55	29	10	7	31	30	80	3	1
Deaths under 5 years	18										
i. Specific infectious diseases	19	2.85	10	9	3	4	5	7	17	1	1
ii. Diseases of digestive system	14	2.10	8	6	9	1	3	1	14		
iii. Diseases of respiratory system	17	2.55	10	7	1	2	9	5	16	1	
iv. Diseases of nervous system	3	.45	3				2	1	3		
v. Diseases of circulatory system, blood and ductless glands	8	1.20	6	2			3	5	8		
vi. Diseases of genito-urinary organs	7	1.05	6	1			3	4	7		
vii. Constitutional diseases	7	1.05	5	2	2		2	3	7		
viii. Intoxication, violence, accidents	4	.60	3	1			2	2	4		
ix. Miscellaneous diseases	5	.75	4	1	1		2	2	4	1	
i. Septicæmia	1	.15		1				1	1		
Pyæmia											
Diphtheria											
Erysipelas											
Typhus fever											
Typhoid fever	2	.30	1	1			1	1	2		
Malaria fever	1	.15	1			1			1		
Scarlet fever											
Measles											
Cerebro-spinal meningitis	2	.30		2	1		1		2		
Smallpox											
Tuberculosis	11	1.65	7	4	1	2	3	5	9	1	1
Influenza											
Dysentery											
Syphilis											
Tetanus											
ii Diseases of the œsophagus											
Gastritis	1	.15	1		1				1		
Enteritis											
Gastro-enteritis	5	.75	4	1	3	1	1		5		
Cholera infantum	2	.30		2	2				2		
Entero-Colitis	4	.60	2	2	3			1	4		
Appendicitis											
Intestinal obstruction											
Diseases of liver	1	.15	1				1		1		
iii. Membranous croup											
Bronchitis											
Pneumonitis	3	.45		3	1	1	1		3		
Pleuritis											
Phthisis	14	2.10	10	4		1	8	5	13	1	
iv. Diseases of brain	3	.45	3				2	1	3		
Diseases of spinal cord											
Neuritis											
Epilepsy											
v. Diseases of heart	6	.90	4	2			2	4	6		
Degeneration of arteries	2	.30	2				1	1	2		
Aneurism											
Anaemia											
vi. Uraemia	1	.15	1				1		1		
Cystitis											
Chronic Bright's disease	2	.30	2					2	2		
Nephritis	4	.60	3	1			2	2	4		
vii. Rheumatism											
Gout											
Diabetes	2	.30	2					2	2		
Inanition	3	.45	3		2			1	3		
Senility and Asthenia	2	.30		2			2		2		
viii. Alcoholism											
Opium habit											
Suicide	2	.30	2				1	1	2		
Violence and accidents	2	.30	1	1			1	1	2		
ix. Tumors—malignant	2	.30	1	1				2	2		
Tumors—non-malignant											
Other diseases	3	.45	3		1		2		2	1	

F. W. STEDDOM, M.D., Health Officer.

OUR ADVERTISERS.

THE TREATMENT OF INTERMITTENT FEVER.

WALTER M. FLEMING, M. D., NEW YORK CITY.

Before the discovery of the tubercle bacillus, many a cough was allowed to continue without treatment and the real difficulty not suspected until a sharp hemorrhage or a hectic fever revealed the true situation. Only a few months ago diphtheria patients walked the streets with a simple sore throat, while cases of follicular tonsillitis were carefully treated as diphtheritic in character. Nearly all of us were taught that malaria was an earth-born poison which filled the air with "a fever-generating agent." Now, all this is changed. The tubercle bacilli can be detected in the earliest stages of phthisis. The Klebs-Loefler bacillus decides the presence of diphtheria; and the malarial germs of Laveran tell us we have an intermittent fever.

It is natural that we look for a remedy which will destroy these germs or counteract their poisonous products. Indeed, it now appears that we have unconsciously to be sure, been given a perfect specific for the cause of the latter disease. Quinine is no longer administered in an empirical manner. We know precisely why we give it and what it does. Quinine exerts a deathly influence over the malarial germ, therefore it may be given with the satisfaction of knowing that it will invariably check the paroxysms of an intermittent fever. If its use is not followed by this cure, then it is certain that it never came in contact with the red corpuscles of the blood. Absorption was incomplete or the quantity of the drug was insufficient. In the light of all this it is certainly bordering on the ludicrous that the National Dispensatory should give a list of seventy-six remedies in the index under Intermittent fever.

The patient has usually had a malarial paroxysm before seeking medical advice. As hepatic activity is neccessary to obtain the best effect of the specific treatment, so, in cases of constipation at least, it is better to begin treatment with the following prescription which should be taken five or six hours prior to the quinine:

℞

Hydrarg Chloridi Mite.
Sodae Bi-carb., ... aa. gr. 1
M.—Divide into six powders.
Sig.—Take one powder every fifteen minutes, using all powders.

This is far preferable to giving the calomel in one single dose and in larger quantity. However, it may be necessary, if the patient is insensitive to purgatives, to increase the quantity in the prescription by one-half. While this preparatory treatment is not necessary, yet it is certainly true that after its employment a less quantity of quinine is required and the general condition of the patient is improved. It has been stated that this treatment should be given five or six hours before the specific treatment. It should now be said that the latter treatment is best inaugurated at such a time that it will be exerting its fullest physiological action when the next paroxysm is due. This time can be quite accurately stated when we remember that a paroxysm often begins an hour earlier than the preceding one and that about three hours are required for the quinine to be in its most active condition in the body.

To insure prompt and complete absorption the quinine is best given in liquid form. The following is a favorite prescription:

℞

Quinia Sulph., ... grs. xv.
Aquae, ... oz. j.
Acid Sulph., ... dil. q. s. ft. sol.
Mx. et. Sig.—Take at one dose in one-third glass of water.

With the above preparatory treatment and with the quinine dissolved, this dose is equivalent to at least twenty grains given after the usual manner; while it is certain we should not trust to pills or capsules at such a time unless we know positively that these are in perfectly soluble condition.

To prevent the uncomfortable head symptons which accompany full doses of quinine and also to relieve the pain which is likely to be present at the same time

of the expected paroxysm, the following prescription should be given four or five hours after the specific:

℞

Antikamnia Tablets (5 gr. each) . . . . . No. xxiv (24)
Sig.—One tablet every two hours while pain necessitates.

In order that there may be no question about the recurrence of an attack, and also in order to bring the system under the influence of a good tonic, the quinine should be continued for one or two weeks in doses of 5 to 10 grains a day. As the malarial germ has left its effects on the nervous system and often to a marked degree, so a remedy is indicated which will put at rest the disturbed condition. The following will be fouud satisfactory in every way:

℞

Antikamnia and Quinine Tablets, . 5 gr. each, No. xxiv.
Sig.—One tablet three times a day after meals.
This tablet contains 2½ grs. Sulph. Quinine and 2½ grs.
Antikamnia, being the most desirable proportion.

If the physician be called while the patient is suffering from a paroxysm, and he is in doubt as to its nature, he has only to remember that any intermittent fever which resists the action of quinine is not necessarily of a malarial origin. Even during the chill of a malarial attack the temperature may rise to 102° or higher, while it is often true that when the chill has passed and the fever is on, the thermometer will show a lower degree of heat. Therefore, no better treatment can be given at the beginning of or during the chill, than the following:

℞

Antikamnia Tablets, ... 5 gr. each, No. xxiv
Sig.—Take two tablets immediately. Repeat dose in two hours if pain necessitates.

The antikamnia will relieve the congestion of the abdominal and thoracic organs and will materially alleviate the headache of the second stage especially. In fact, it practically robs the fever of its most distressing features. When we consider that the cause of intermittent fever is so thoroughly understood and that quinine is regarded as its specific, destroying said cause, how puerile are all attempts to bring forward new substitutes. Although pain may not be dependent upon any special living organism, yet it is certain that in antikamnia we have a most reliable specific. In regard to the treatment of all forms of Febrile Maladies, periodic or continued, I have found the Antikamnia Tablets with its various combinations of codeine, salol or quinine, (as indicated in each individual case,) the most reliable, prompt and satisfactory remedies in controlling these intractable disorders of any remedical agent known to me in a general active practice of over thirty years.

SEXUAL NEURÆSTHENIA.

In the course of an able paper, which appears in the November issue of the *Medical Sentinal*, Dr. David H. Rand, of Portland, Oregon, late secretary of the Genito-Urinary Section of the American Medical Association, etc., says:

"In many of these sexual troubles, particularly where there is a nervous phase, the strictest attention must be given to the general condition of the patient. The bowels must be kept open and toned up, and good nutritious food administered. Some one of the artificial foods may be used with advantage, and I am especially well pleased with the new product, Paskola. It has given me great satisfaction where used in many cases."

We earnestly recommend that physicians who have not tried this article take advantage of the manufacturers' liberal offer which appears elsewhere in our pages.

PRE-SENILITY—OVARIAN PAINS—CHRONIC ENDOMETRITIS.

I have been using Sanmetto for the past two years with surprisingly good success: As a remedy for declining virility there is no equal, in fact it is a *sine qua non*. Have also given it with success in ovarian pains, and in that troublesome and painful condition due to chronic endometritis. Sanmetto is an important addition to our therapeutical means. Its beneficial effects are simply marvelous.

Crystal River, Fla. J. D. BENNETT, M.D.

THE MALTBIE CHEMICAL CO., Buffalo, N. Y., call the attention of our readers to their introductory offer in a colored insert in this issue, it is "a generous offer" and no doubt many of our readers "will accept it."

Their method of introducing new preparations is not only novel, but reasonable, they do not spread small samples broadcast, but charge a small price for full size boxes, and then exchange any preparation for its value in others.

Their plan has every appearance of success, in fact their goods are already favorably known to many of our physicians.

W. A. BAKER, M.D., Clark's Mills, Pa., says: I have had occasion to try CELERINA, and am highly pleased with the results. I have used it with marked success in nervous prostration. A lady, 64 years of age, of nervous temperaments, was stricken down with congestion of the right lung. After the congestion disappeared, her nervous system failed to recover, resulting in prostration. After trying several remedies, I commenced using CELERINA and gave teaspoonful doses every six hours, with steady improvement, until restored to normal condition.

USE ONLY THE GENUINE SUCCUS ALTERANS.

Frank McDonald, M.D., College Physicians and Surgeons, Baltimore, Md., 1883, Supreme Medical Director W. S. of I. O. U. A., Medical Examiner Equitable Life of N. Y., Sec'y Pitsburg Obstetrical Society, etc., says:

"Your SUCCUS ALTERANS gives me perfect results. I prescribe it almost daily, and have never failed to obtain the effect sought. I regard it a specific for syphilis in all stages. Imitations which I have been induced to try occasionally have always failed. Such failures have only served to confirm my confidence in the genuine SUCCUS ALTERANS. I can pay no greater tribute to an article so worthy and so meritorious than to say it is the very best and safest alterative known to the profession."

PRACTICAL DIETETICS.

By W. Gilman Thompson, M.D., Professor of materia medica, therapeutics, and clinical medicine in the universty of the city of New York, visiting physician to the Presbyterian and Bellevue hospitals, etc., (pages 142 and 143.) Diastase is a vegetable ferment which has the property of converting starchy foods into a soluble material called maltose. Like the ferments in the saliva and pancreatic juice, it acts in alkaline solution, but, unlike them, it continues to operate in acid media and, therefore, its action is not disturbed by the gastric juice. Diastase is a peculiar substance which causes the ripening of fruits and vegetables by converting their starches into dextrins and sugars; hence fruit becomes more and more digestible as it ripens.

Maltine is made from three cereals—barley, wheat and oats. *It is rich in diastase.* It may be taken either plain, with cod liver oil, with coca wine, with pancreatin, with hypophosphites, etc., in tuberculosis and other diseases.

VIN MARIANI AND THE DISPENSARY LAW.

The dispensary law in South Carolina has of late been so rigidly enforced that many druggists were afraid to sell even medicinal preparations containing wine as one of the constituent parts. This seriously interfered with the sales of the well-known tonic Vin Mariani throughout South Carolina, and the proprietors of that famous specialty made vigorous representations to the Governor on the subject. As a result of these representations, Vin Mariani has been specially exempted from the workings of the dispensary law, as is shown by the following letter received by Messrs. Mariani & Co. from Gov. Evans:

(Copy.)

STATE OF SOUTH CAROLINA, EXECUTIVE DEPARTMENT,
OFFICE OF STATE BOARD OF CONTROL.

COLUMBIA, S. C., Oct. 5, 1895.

Mariani & Co., 52 West Fifteenth Street, New York.

DEAR SIRS—In reply to your favor of 30th ult., Gov. Evans directs me to say that you have his permission to sell the Vin Mariani, and he will exempt it from seizure in the State when not sold as a beverage.

Respectfully, W. W. HARRIS, Clerk S. B. C.

SOUTHERN CALIFORNIA PRACTITIONER.

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ORIGINAL.

TRACHOMA OF THE FEMALE GENITAL TRACT; HYDROCELE OF THE LABIUM MAJUS.*

BY WM. A. EDWARDS, M.D., SAN DIEGO, CALIFORNIA.

FELLOW OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA; FORMERLY INSTRUCTOR IN CLINICAL MEDICINE IN THE UNIVERSITY OF PENNSYLVANIA; PHYSICIAN TO ST. JOSEPH'S HOSPITAL; ASSOCIATE PATHOLOGIST TO THE PHILADELPHIA HOSPITAL, ETC., ETC.

Trachoma of the female genital tract.—

For the last few years, since coming to California, I have occasionally met cases of obliterative inflammation of the genital tract. During six and a half years I have observed eight such cases, and these will form the basis of the present communication. The condition has been variously designated in the literature as vaginismus, vascular degeneration of the vulva and the vagina, granular vaginitis, kraurosis vulvae. These terms did not to me correctly express the condition, and it was not until the paper of Johnstone, before the American Gynecological Society, May 29th, 1895, that the disease received a proper classification in our nomenclature. It was this observer's previous experience as an ophthalmic surgeon which enabled him to correctly interpret the visible phenomena of this obliterating inflammatory disease and correctly designate it Trachoma. DeSchweinitz, in his book on diseases of the eye, defines trachoma as an inflammation of the conjunctiva, in which the membrane looses its smooth surface owing to the formation of rounded granulations which after absorption

*Read before the Southern California Medical Society, Los Angeles, Dec. 4-5, 1895.

leave cicatricial changes; it occurs under two forms, acute granulations, and chronic granulations, and we consider that the term trachoma is equally applicable to the disease that we are now describing.

This form of vulvitis is not described at all in the text books, either old or new. The more pretentious treatises as The American Text Book of Gynecology, Pozzi's Medical and Surgical Gynecology, and the Clinical Gynecology of Keating and Coe are as silent as the smaller volumes of Madden, Martin or Scanzoni, indeed Winckel's Diseases of Women is the only work that makes a fair attempt at the description of the disease, he remarks that very many of these disorders are grouped as pruritus of the vulva, because from want of exact observation their special character is not known. The study of these diseases has not been interesting enough to excite close observation.

Martin, Centralblatt f. Gynaekologie, Leipzig, '94, has described three somewhat similar cases, under the title Kraurosis Vulvae. He also states that the disease cannot be traced to any venereal or microbian influence. It may occur in young or old, virgins or multiparae. Sänger has also contributed a paper during the year just past.

With the acute granulations we have little to do, as the patients rarely come to us with this condition. All that I have seen presented the chronic forms and of three varieties, papillary trachoma, follicular trachoma and mixed trachoma. I have never been able to determine the presence of a special form of micro-organism which could be looked upon as the causative agent in the production of the condition under consideration, nor am I able at present to offer any satisfactory etiology of the disease. It is a fact that four of my cases were in women of advanced years, that is between fifty-five and sixty, one was a young woman of thirty-seven in whom I removed both ovaries about a year ago. Another was a woman who married late in life; she came under my care for dilatation and curettage of the uterus and removal of hemorrhoids; the vaginal secretions were always scanty and perverted. About three years ago she commenced to develop a trachoma, ran through a typically chronic course of the disease, but is now practically well. Another case, a woman aged sixty-six, was operated upon last January, a pan-hysterectomy was done. Shortly after the operation the disease developed but was comparatively easily controlled. The other cases presented absolutely nothing that could bear at all on the cause of the disease except that, they gave in two cases a distinct history of an antecedent attack of cystitis.

The usual clinical manifestations of the disease are very similar indeed to those of acute or chronic trachomatous inflammation of the eyelid. It usually begins in the region of the clitoris extending downwards over the entire vulva and it is apt to involve the urethra and vagina. The parts present a peculiar and characteristic appearance, in places deep red, almost black, resembling a subcuticular mottling or a petechial patch not unlike in appearance, the sub-mucus or subcutaneous hemorrhages of purpura rheumatica. The surrounding tissues are apt to be anaemic but the papilla stand up like sago grains, a slight touch is apt to produce bleeding.

After the disease has existed for a time the parts become fissured and cracked more or less deeply. A thin ichorous discharge is present but it is always scanty, indeed this is somewhat diagnostic.

Later in the course of the disease, like its analogue in the eye, diffuse scar tissue results and it is then that the disease may be called trachoma deformans.

In some cases this deformity is most marked, the normal contour of the vulva is obliterated, the labia minora first adhere to the larger labia and then become obliterated by scar tissue, the vaginal outlet contracts and the orifice is almost

closed, a condition well illustrated by the accompanying photograph. These women are perhaps the greatest sufferers that we are called upon to meet and I must confess that the resources of our art do not afford them very much relief. The cases are essentially chronic in nature, and the stubbornness with which the disease persists is often most discouraging. My own plan of treatment has been to keep the parts as clean as possible either with pyrozone solutions of varying strength, saturated boric solution or, in some cases, a 20 per cent. salicylate of soda solution. These solutions are to be injected into the vagina after a bath speculum has been introduced in order that all the folds and interstices of the vagina may be thoroughly cleansed; better still if the patient can command the services of a trained nurse, is the thorough cleansing of the genital tract in a similar manner to that which is preparatory to a plastic operation. The granulations, cracks and fissures are touched occasionally with campho-phenique or 5 per cent. pyrozone solution and the parts thoroughly dusted over with compound stearate of zinc. The patient is instructed to bathe the parts in a soda solution after each urination and again apply thoroughly the zinc powder.

Johnstone recommends an ointment of the yellow oxide of mercury, 4 to 10 grains to the ounce, used twice daily.

My experience accords with Johnstone in that the cases will persist from six months to two years under any and all kinds of treatment, and will usually result in great deformity.

Hydrocele of the Labium Majus.—

A prolongation of peritoneum may reach below the mons veneris through the inguinal ring, covering the round ligament, this peritoneal investment may become adherent about the ring and a transudation of serum occur into the cavity thus formed. The condition is then known as hydrocele of the round ligament or hydrocele of the labium majus. The labium presents a fluctuating egg shaped tumor, more or less firm. The round or as it is sometimes styled the utero inguinal ligament is a stout cord twelve and a half centimetres in length which with its fellow on the opposite side, arises from or is attached to the uterus on its anterior superior surface just in front of and below the fallopian tube. It consists of areolar tissue, dense fibrous tissue, unstriped muscular tissue, vessels and nerves, enclosed in a peritoneal covering. The unstriped muscular fibres seem to be continuous with the superficial uterine fibres; each ligament, then, as McClellan states, "passes forward in the folds of the broad ligament to the deep abdominal opening on either side behind the epigastric artery, where it enters the inguinal tract. Here there is already provided a process of the peritoneum called the canal of Nuck, similar to the processus vaginalis, and the ligament pursues a course analogous to the spermatic cord in the male, eventually losing its character in the tissues over the pubes." "In the adult there is rarely any trace of the peritoneal process or of the muscular tissues of the round ligament beyond the middle of the inguinal tract. Occasionally the canal of Nuck remains patent and may become the seat of congenital hydrocele or even of inguinal hernia." The ligament in the canal receives a small accesion of striped fibres, which sometimes are attached to the pillars of the ring and to the spine of the pubis.

As we have seen, the ligament, as it leaves the ring breaks up, as Morris says, into a number of delicate fasciculi which become lost among the interlobular connective tissue of the large pad of fat which occupies the labium majus. It is on account of the anatomy of the round ligament that I have always raised my voice in opposition to Alexander's operation or any of its modifications, but this is only by the way in the present communication.

Hydrocele of the ligament or of the labium as you may prefer to call it is a

comparatively rare condition. In fifteen years I have met but one case, the salient points of which are as follows: Mrs. A. B.; aged 35 years. IIIpara. Seen in consultation with Dr. Johnson of National City April 17th, 1895. The woman was in the seventh month of utero-gestation, the left labium majus was enlarged, swollen, oedematous and fluctuating; measured about 10 centimetres in its long axis and 6 centimetres in the transverse axis. The prominence was elliptical and to a certain extent retained the normal contour of the parts. The surrounding tissue was somewhat oedematous from pressure; the vaginal tube was encroached upon and the pelvic fascia and muscles on the left side were infiltrated with serum, particularly the anterior portion of the levator ani, some of the fibres of which could be plainly outlined by their tenseness. It resembled the case of Schrœder (Krank. d. Weib., Geschlectsung. v. Auflage 1881. Winckel.) in that the fluid could be returned to the general peritoneal cavity, showing that the communication between the vaginal process and the abdominal cavity was patulous.

Pain was present to a very slight degree, except on manipulation and then the greatest tenderness was in the vagina and left pelvic fascia and not over the hydrocele. Mental distress was marked, the patient and her friends were extremely anxious over her condition, on this account mainly she was placed in the recumbent position by Dr. Johnson, as most of the fluid would return to the abdomen when she was prone. Utero-gestation progressed in a healthy manner and the woman passed through a normal puerperium under the care of Dr. Johnson.

A hydrocele in the labium may be one of several varieties:

1st. That which we have described, in which there exists a patulous canal of Nuck. The fluid is excreted from the peritoneal surfaces covering the ligament and is free to return within the general peritoneal cavity.

2nd. The sac may be entirely cut off from the abdominal cavity and dropsy occur in this closed sac. Such cases have been observed and recorded by Sacchi and Fleming (Gaz des Hop., 1885, p. 21; Bush, Lc., 82–Winckel.)

3rd. The cellular tissue of the labium majus consists of two layers which are prolongations of the superficial abdominal fascia. These two layers which are considered the analogue of the dartos tunic and between them a serous tumor may form. This is considered by some to be the true hydrocele in a woman.

4th. The substance of the round ligament itself may be the site of a cyst. The gubernaculum of Hunter in the foetus becomes the round ligament in the female. This foetal structure is at first hollow, as demonstrated by Weber, (Centr. f. Gyn. 1887, No. 21.) and as Staffel, (Ueber Cysten der Canalis Nuckii, Centr. f. Gyn. 1888, p. 273, Pozzi,) states there may be a persistence of this foetal condition which allows the formation of a cyst within the round ligament itself.

Eisenhart, Muchener med. Wochensch., Munich, 1894, has collated the 48 cases of hydrocele in the female in the literature and finds that 29 were upon the right side and 19 upon the left; he considers traumatism and congenital defect to be the most frequent causes. Smith, (Sajous' Annual, Vol. II, H—8, 1895,) believes that the disease is not so rare as I have stated. During a period of four years, he says, five cases have been operated upon in the Tottenham Hospital.

The treatment of hydrocele feminina is operative. Expose the cyst by a linear incision, ligate the neck and enucleate. The wound is to be closed by superimposed layers as in the closure of hernia. The suture material is at the pleasure of the surgeon, personally I rarely use cat gut, as I do not believe that at present it is possible to render it absolutely sterile in all instances. I use silk. Unless the wound is closed as we would an inguinal hernia the woman is rendered liable to an hernial protrusion. Simple puncture of the hydrocele is of little avail. For-

tin, however, tapped twice, in the first instance he injected a two and one half per cent. solution of zinc chloride and a glycerine solution of creasote in the second; a cure was established.

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POISONOUS SPIDERS OF SOUTHERN CALIFORNIA.*

BY C. W. BROWN, M.D., POMONA, CAL.

I have taken up this subject for two reasons. First, because I have met with a number of severe cases of spider bite, and the results of the lesion, near and remote, have interested me greatly; and secondly, because I have been unable to find, either in my own library or in those of my neighbors, an adequate description of these cases as we see them here.

I might, perhaps, better have entitled this paper, *A* Poisonous Spider of Southern California, as it will deal almost entirely with one species of spider.

Southern California, so far as I am aware, has but two species of spiders that are dangerous to mankind. Of the Tarantula, I have seen a few cases of bite reported in the newspapers. No case has ever come under my observation and I shall not attempt to write of it.

I have under observation two specimens of the spider of which I wish to write. It is about one half an inch in length with long legs. It has a small cephalothorax and a large round abdomen. In color it is a glossy black, with a red spot on its under side. It is not hairy or fuzzy, its abdomen appearing like a hard glossy black shell. The partly grown spider has grayish stripes on its back. In the article on spiders in the Century Dictionary, is a cut of a spider which well represents that of which I write. It is classed as Latrodectus Mactans. The subject of this article undoubtedly belongs to the genus Latrodectus, of which I find several species reported in medical literature. Wherever found and whatever the species the Latrodectus is active, fierce and poisonous.

The Reference Handbook of the Medical Sciences, states that in 1830 and 1833 the Latrodectus Malmignatus which is found in Southern Europe, appeared in some regions of Spain in great numbers, creating widespread fear. During the harvest many people were dangerously bitten. Ziemssen speaks of this same spider, described as half an inch in length and furnished with largely developed

*Read before the Pomona Valley Medical Society, Nov. 21st, 1895.

poison glands. The poison is thought to exercise a specific action upon the nervous and muscular systems.

The Latrodectus Katapo of New Zealand is mentioned in the Century Dictionary as very venomous. Ziemssen says of it, "Its bite produces a white vesicle at the seat of the wound, which is surrounded by a red areola, and is attended by severe pain. The pulse is scarcely perceptible, and greatly retarded. Great dyspnea is observed with lividity of the face, and cold extremities." The same author also states that "In the steppes of the Kirghuz there is found a spider, Latrodectus lugubris, which measures about half an inch in length, and which is extremely dangerous, especially to large animals. One-fifth of all those bitten are destroyed, although of human beings thus wounded only four per cent. die. There is experienced after the wound, a smarting pain at the seat of the puncture, gradually extending over the limbs and entire body, *while there is an absence of all redness and swelling*. This is rapidly followed by cold sweats, restlessness, dizziness, mental anxiety, depression, vomiting, cyanosis, convulsions and a typhoid condition. These symptoms do not abate before the third or fourth day, while a fatal result may occur after two or three days."

I wish to call particular attention in the above to the absence of redness and swelling.

In Dennis' System of Surgery is given a short synopsis of an article by Dr. Parry, in the Australian Medical Gazette for June, 1894, in which three cases of spider bite upon the penis are detailed; the nesting place of the animal being under the seat of an out-of-doors privy closet. All the cases occurred in the month of March, and in each case an examination of the locality revealed a brood of spiders of the genus Latrodectus, consisting of a mother with from twenty to thirty young ones." Dr. Parry suggested that they might be venomous only in the breeding season; but Dennis believed that they were "simply more easily excited to attack at this time owing to the maternal instinct."

Parry mentioned that the local symptoms were burning pain and *swelling*. "The remote effects on the nervous system were shown by the occurrence in the course of a couple of hours after the injury, of an exceedingly disagreeable pain as of pins pricking in the patient's toes; this gradually spread up to his ankles and knees; the parts became bathed in a cold perspiration, the temperature was slightly subnormal and the heart's action feeble." Severe pains lasted forty-eight hours, but for two weeks there were darting pains through his legs and around the lower part of his abdomen. The sweating was profuse, peculiar and offensive.

While none of the above descriptions of spider bite and its resulting symptoms correspond entirely with those I am about to report, they are certainly very closely related.

An editorial note on "Poisonous Spider Bites in California," in the Occidental Medical Times for September, 1895, attempts to discredit the reports of such poisonous bites or that the bites of spiders are poisonous to any serious extent. The editor ascribes the nervous, and other symptoms to the combined influence of a highly nervous patient, and the too liberal exhibition of stimulants. But, having cited the authorities I have, regarding the venomous and serious nature of spider bites in other parts of the world, I shall venture now to assert and show that in Southern Calrfornia also, the bite of this species of spider is a serious matter.

During the past fifteen years, I think I know of at least a dozen cases of spider bite in Pomona, and though I have taken no pains to obtain reports from other places in this section, I have heard of cases in Pasadena, Azusa, Ontario, Cuca-

monga and Riverside. The bites have nearly always if not invariably occurred in the months of August, September or October, thus corresponding to Dr. Parry's cases in March in Australia, in the southern hemisphere.

The bites have been received in all case, I believe, in an out-of-doors privy, and almost always in the evening after dark. An after examination has generally shown the web of a spider across or near the hole, and the lifting or removing of the seat has exposed a greater or less number of spiders, about their nesting place underneath. They are active and combative when disturbed. A physician friend tells me he recently attempted to catch one that he found on lifting the hinged slab of a closet. He held a pail under the spider but it easily jumped over the pail. Others have told me that when it was disturbed it would jump several inches at a stick and seize and bite it viciously.

The great majority of those bitten have been males, although I know of at least one female having been bitten in Pomona and one each in Riverside, Ontario, Azusa and Pasadena. All the cases I have ever treated have been males, and all were bitten upon the penis. If called immediately after the bite was received, I have sometimes found at the point of greatest pain a small red spot, barely perceptible, where the poison fangs entered, but twelve or twenty-four hours later it was undiscernible. This fact, namely, the entire absence of redness, inflammation or any swelling, either at the point bitten or elsewhere, I believe to be one of the most remarkable phenomena in the history of these cases. It differs in this, from the history of the effects of the bite of any other spider or animal or insect, or the action of any other poison venom of which I can learn except that of the Latrodectus Lugubris before referred to, found in the steppes of the Kirghuz.

In all the cases of which I am informed the person bitten, while seated in the privy was suddenly seized with a sharp, severe, burning or stinging pain on the glans penis or, as in three cases of females reported to me by other physicians, near the margin of the anus, or wherever the bite may have been. This pain increased rapidly, extending through the pelvis, sometimes to every part of the person, until in a few moments of time the suffering was almost unbearable. Some delicate patients have been nearly in convulsions before a physician could reach them. This extreme pain has continued from one to three days, as a rule, but has shown in some cases, a tendency to leave the pelvic region, in a measure, after the first few hours and manifest itself more in the lower limbs, and in the abdomen and thorax, causing great precordial distress.

There is in many cases a rigidity or tonic spasm of the muscles, markedly of the abdominal muscles. There is also dyspnea, depressed and retarded heart action, small weak pulse, subnormal temperature, cold extremities, and in some cases a profuse cold perspiration. There is great anxiety and mental depression. The above conditions are found not only in the case of weak or nervous persons but also in that of the strong.

These cases are very slow to yield to medicines. The remote effects upon the nervous system and general health, are frequently marked. Pains continue to shoot through the pelvis and body occasionally, for several days or weeks, and recovery is slow. Some cases have been from three to six months in recovering from the effects of this poison. I will not say whether these after effects are from a peripheral neuritis as Dr. Parry regards it, or result from the nervous shock.

When called to a case I have always pushed hypodermics of morphia and atropia in large doses, but have invariably found the pains very slow to yield. In this, other doctors of my acquaintance concur, they having reported injecting a

grain or more of morphia in a few hours with imperfect relief. I have found alcoholic stimulants, freely pushed, much more effective in relieving the pain and other distressing symptoms than are opiates. I have also found these cases to bear surprisingly large quantities of stimulants without showing any symptoms of intoxication.

I will relate two cases, the first the mildest and the second the severest in my experience:

CASE I.—One night in 1883, I was called to see the Rev. W., pastor of a Pomona church. I found him in great pain. He told me that about two hours previously, just as he was ready to retire he visited the privy, and while sitting there he suddenly felt a sharp stinging sensation on his penis. Thinking he had been bitten by some insect he had immediately gone in and applied ammonia and other remedies but without relief. His wife had examined and found a spider web woven just under the hole in the seat where he had set, and they had concluded he was spider bitten. He could point to the exact spot on the glans, where the pain started. I examined and found, clearly seen, the small punctures. I could not find them the next day, the penis showing no injury nor swelling.

I had never seen or known of a spider bite of this character. I injected opiates freely but the relief being small and shock and depression marked, I procured a bottle of brandy and gave him during the night about eight ounces. I think I got him a little tipsy but he certainly bore a large amount for a man who, as he assured me, had never tasted of intoxicants before. Their effect was most happy as he was quite easy by morning, and his pains did not return with any severity, but he did not recover from the prostration so as to be able to fill his pulpit for several weeks.

CASE II.—I was called to see Mr. R., a harness dealer, on the evening of July 7, 1887, just after dark. He told me he had been bitten, as he believed, by a spider, while in his privy a few moments before. An examination showed no very clear mark of the bite, but he was in extreme agony, constantly changing position from bed to chair or to his feet and groaning with pain. He showed in heart, circulation, respiration and skin, the usual symptoms of these cases. I treated him with large hypodermics of morphia and atropia and with stimulants freely. I succeeded in giving but partial relief, and was obliged to keep him under this line of treatment for four or five days. He was about starting for a visit to his former home, near Boston.

He was compelled by this injury to defer his journey for several weeks. After going east he was under the care of a physician for some weeks. His doctor wrote me a full statement of his condition. He was greatly interested in the nervous and general symptoms, which he believed were due to this spider bite, and asked me many questions regarding the spider, the lesion, and the immediate symptoms. He wrote that he proposed reporting the case.

My partner, Dr. F. Garcelon, attended a very severe case in September, 1894. The patient; a young woman of not very robust health, was confined to the bed several weeks as a result of the bite, and was at least six months in recovering her usual health. She was bitten near the margin of the anus, and was in an agony of pain before she could get into the house. The doctor found her in a condition little short of general convulsions. She suffered severely for several days and her pains had to be controlled by anodynes for weeks.

Dr. J. A. Metcalfe, of Azusa, informs me he has attended four cases of spider bite. All his cases showed the same severe group of symptoms I have related.

Dr. Gregory, of Ontario, told me she had treated three cases which, in all essential features, resembled mine above reported.

There seems no doubt but that this little animal is provided with a venom that for its size and the quantity of the poison, far exceeds that of any other living thing.

THE OBSTETRIC NURSE AND HER CARE OF THE CHILD.*

BY GEORGE DEACON, M. D., PASADENA, CAL.

In speaking of the obstetric nurse, the members of this Society will recognize the fact, that, as met with in general practice, there are many varieties of her. Of the competent, conscientious and painstaking nurse, who not only follows carefully the instructions of the attending physician, but in his absence is quick to see and prompt to act in case of emergency, I have words of commendation only. She is a jewel, yea, a necessity if we would in all cases have the best results; and the knowledge that the physician is leaving his patient in the care of such a one, enables him to go about his daily work with little anxiety for the welfare of mother and child.

Would that we could say this of all who assume the responsibility of caring for the puerperal woman. I have never been able to explain satisfactorily to myself, why it is that so many women, out of employment, seem to think that if they can do nothing else, they can nurse, and without the least hesitation are ready to take upon themselves the care of the lying-in woman and her child. A great deal of this self-confidence is born of ignorance of the full responsibility of the obstetric nurse. Through friendship or charity, a woman without any previous experience, nurses a friend during her confinement. It is a normal labor; the physician shows her how to dress the cord; it is a healthy child and needs little attention; lactation is established without accident; and everything moves along smoothly. At once we have another full-fledged nurse. Recommended by her friend and first patient, she secures employment in a case that requires the skill of a trained nurse, and the results are disastrous to the patient and damaging to the reputation of the attending physician.

I never enter the lying-in room without feeling a heavy load of responsibility resting upon me, and if my patient is already the mother of children, my responsibility seems doubly great. Of necessity the physician can be with his patient but a limited time, while his assistant—the nurse—is in constant attendance and much depends upon her knowledge of the requirements of her position and her ability to understand and carry out her instructions. How necessary, then, that we should insist upon this, that our nurses be well trained and competent. Not only may the present safety and future health of our patient depend upon this, but our professional reputation as well. Cases of puerperal fever, mastitis, and the complications that may follow child-birth, are soon known, not only by the patient's friends; but also by her friend's friends, and the first question asked by them, is not "Who is her nurse?" but "Who is her physician?" And although the infection may have been carried to the patient by the partially cleansed hand of a careless nurse, or the mastitis be due to her neglect of, or her inability to relieve a distended breast, it is the physician's reputation that will suffer.

My plea is for nurses that are better trained, and I believe it a duty we owe to ourselves as physicians to discourage the practice so common, viz.: the taking up of this work by those not properly prepared for it. It is true that we have some good nurses that have never had the benefit of any training school except that of experience, but that does not argue that it is the better way to prepare our nurses

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for their important duties. It will be admitted that in the ordinary walks of life, the lessons taught by experience make the deeper and more lasting impressions upon the mind, but in those cases, the individual receiving said lessons, pays the tuition, whatsoever it may be. But with her who would gain knowledge of nursing by experience, it is different; she is dealing with human life, and although in a given case she may learn a lesson that will enable her to do better in future, the knowledge may be gained at the cost of the life of mother, or child, or both. What words have you for the man who essays to practice medicine without previous preparation? You would at once brand him as an impostor, and a dangerous fellow. Is it not a fact that she who enters the lying-in room as nurse, without due preparation for the duties of that position, is as dangerous an element in a community as the uneducated physician?

In the case of the child, the short-comings of the self-made nurse are more manifest, if possible, than in that of the mother. There seems to be an insatiable desire in many of them to feed the baby. In their eyes the new born baby is a ravenous little animal, and if perchance he cries, the conclusion is at once reached that he is hungry and must be fed. Without the least knowledge of physiology or the process of digestion they are sure that there is a serious defect in nature's arrangement for the reception of these little ones, else there would be an abundant supply of provisions on hand upon their arrival. They at once proceed to remedy this defect by administering all sorts of stomach disturbing potions, ranging from catnip tea to cow's milk straight, with the result that by the third or fourth day, when the flow of breast milk is established, the child's digestive organs are in no condition to take and assimilate it, and the nurse wonders why the little thing has colic. I believe that nine out of every ten, yes I think I may say ninety-nine of every hundred cases of colic in the new born child, are due to the pernicious if not criminal practice of putting into their stomachs during the first three days of their extra-uterine existence, some of these, to them, indigestible things. It is about time that nurses, and the old mothers in Israel who are ever present, and ever ready to suggest the best thing to feed baby, should understand that only in the exceptional cases is it necessary to give anything to the child except that provided by nature for it; and the exceptional cases should be those only where, through accident or disease it is impossible to place the child at the mother's breast. It is true the supply of food that the mother will be able to furnish for the first two or three days will be limited in quantity, but it is just what the child needs, and all it needs, except pure water, which should always be given.

The physician's life at best is full of care and responsibility, and anything that will tend to make his load lighter is always welcome. It is not necessary for me to point out the difference between the trained and the untrained nurse in the lying-in room. You have met both of them there, and while in the one case you go about your work with no anxiety and little thought of your patient, for you feel that she is in the care of one that knows her duty and will follow your instructions even in the face of opposition,—in the other, the welfare of your patient is, to a greater or less degree, a source of anxiety to you, and you wonder what new thing in nursing you will learn, when next you visit her. For, during your absence Mrs. Busybody may have called, examined your patient, countermanded your orders, and told the nurse how the thing ought to be done. Mrs. B. has had seven children, and of course her suggestions are valuable. The trained nurse may listen to such suggestions with what patience she can command, but, if true to her training, will not be influenced by them.

The profession of nursing is one of the noblest and grandest to which woman

can devote her time and talents. Time was, and not so very long ago either, when trained nurses were unknown. The difference between then and now cannot be better stated than in the words of Sir Edwin Arnold, as he says,—"In your father's day, gentlemen, we had no good nursing; we had Mrs. Gamp and Mrs. Betsey Prig, or else heavy-handed and heavy-footed male attendants, very different in mind and manner and influence from the lightly moving and softly speaking woman, whose carefulness—intelligent, pitiful but tranquil, trained and governed—now smoothes every sick pillow, and carries out faithfully and fearlessly the ordinances of the doctor. I do not know whether you, the surgeons and physicians, or we, your patients, are most to be felicitated upon this admirable revolution in the hospital ward and the sick room."

It may be claimed that many of our patients are not in position financially to employ trained nurses. This is doubtless true in some cases, but in many it is false economy, too often suggested by a penurious husband, who does not seem to realize how near to the brink of the dark river she who is about to become a mother may pass, while giving to him and to the world the new being.

I believe it is within the power of the medical profession, to do much toward educating the people to the necessity of having in attendance upon the puerperal woman, one skilled in the art of nursing.

CIRCUMCISION IN URTICARIA.*

BY RALPH WILLIAMS, M.D., LOS ANGELES, CAL.

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Urticaria is a disease of the skin, angio-neuropathic in character and manifested in the acute stage by burning and itching, with the formation of peculiar efflorescences called wheals or pomphi, and in the chronic stage chiefly by itching and the formation of papules.

The disease is caused in most instances by the irritation arising from the ingestion of such substances as the different shell fish, notably mussels, oysters, crabs, lobsters; such articles of food as fish, pork, sausages, buck wheat cakes; or fruits as strawberries, raspberries; and by such drugs as quinine, copaiba, cubebs, etc.; or in a general way by articles of diet to which the patient presents a certain peculiar idiosyncrasy. Among the external causes may be mentioned the stinging nettle, from which the disease is named, jelly fish, caterpillars, fleas, mosquitoes, etc., and other causes I will mention later.

The irritation, whether it be direct, reflex, central or peripheral acts upon the vaso-motor nerves of the skin and causes, according to Vidal, at first a contraction of the arterioles followed by a relaxation of the same allowing the escape of small quantities of serum and leucocytes into the papillary layer of the corium forming local edematous swellings, or as they are called, wheals.

Unna, from his examination of a wheal, considers the lesion due to a spasm of the small veins of the skin which normally carry off the lymph; as he found edema of the lower layers of the cutis forming fissures and loculi in the lymph vessels and spaces.

To better illustrate to what an extent the disease depends upon an irritation I will cite certain peculiar cases:

McCall Anderson in his work on dermatology quotes a case of Hebra's.—The patient, a woman suffering from a flexed uterus. On introducing the uterine

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sound, Hebra produced the eruption fifteen times in succession. Alibert reports many peculiar cases, notably that of a preacher, who frequently had an attack of the hives on entering his pulpit, and that of a woman, on entering a parlor full of company; and perhaps the most remarkable one, of a woman in whom the eruption appeared whenever she began to speak, this condition lasting sixteen years.

If such slight causes may produce an acute attack of urticaria, may we not think, in absence of other known causes in a given case, that the disease may be kept up, and become chronic from the slight but continued irritation arising from the causes for which circumcision is advised?

The operation of circumcision as a therapeutic measure in certain dermatoses which are caused or influenced by a reflex irritation, and of which class of cases urticaria is the most frequent and distressing sample, is based upon the well known fact, that an elongated, adherent prepuce in the male or adhesions between the glans clitoris and its hood in the female, covering as they do a glans which is inflamed and irritable, from lack of cleanliness and the presence of decomposing smegma, will give rise, especially in children, to numerous irritations, reflex in character which may manifest themselves either upon the general nervous system of the child, upon the bladder causing enuresis or, what is more to our purpose, upon the skin.

The first three cases I will report occurred under the observation of Dr. Mac Gowan and myself at the skin clinic of the medical college here, the last two in his private practice and for the notes of them I am indebted to him.

Case I.—August 3, '95. M. A., aged 13 months, female, born in California. Body of child covered with pin point to pea sized papules, the larger ones being distinctly urticarial and some appear while examining patient; they itch severely, the child constantly scratching. The bends of elbows, popliteal spaces, ears and scalp are free, otherwise the lesions are pretty general. The smaller papules are pin head in size with slightly flattened tops, with no scales, the color brownish or reddish brown. Has had the disease one month. Bowels constipated. After urinating seems to have a chill.

Case II.—T. M., aged 3 years, born in California, male, brother of above. Chronic papules, vesicula urticaria. Body covered with pigmented spots and papules, itching very severe, trouble dates back to the age of four months. This case had been treated off and on by various physicians, using the usual sedative and antipruritic drugs, correcting any intestinal trouble, etc. As he was found to have a phymosis, on August 6, we circumcised him, and on the same day with the blunt flat end of a probe we broke up quite a number of adhesions between the glans clitoris and its hood removing quite a little smegma, from the first case. The children were also subjected to local antipruritic lotions, diuretics, etc. The girl rapidly recovered, the boy more slowly, but in less than two months both were well and so far as we know have had no more attacks.

Case III.—E, R., aged 1 year 5 months, born in California. Chronic papular urticaria of body and arms with some on legs; has lasted for four months with acute exacerbations causing swelling of tongue and fauces. There is nothing apparently wrong with the intestinal canal or other organs, appetite good and bowels regular. Child has a long foreskin not inflamed, but unable to retract it. After treating patient in usual way for some three weeks, we advised circumcision. In September, I do not know exact date, the operation was done and previous treatment continued; shortly afterward the child being seemingly better, the mother ceased to bring him to clinic so I have no further notes. There had been no fresh outbreaks, but the skin was not entirely free from papules.

CASE IV.—A. C., male, aged eight years. Chronic papular urticaria, recurrent many times annually since age of two years. Treated more than a year ago by usual methods, using nearly all drugs recommended, with diuresis and diaphoresis, special attention to intestinal canal. No beneficial result following, the disease was believed to be reflex in nature, and having found a slight condition of phymosis present, he was circumcised in October, '91. The operation was not immediately beneficial, but on Dr. MacGowan's return from Japan, three months later, the attacks were found to have diminished both in frequency and severity, and ceased entirely in six months with no recurrence since.

CASE V.—H. F., aged 3, male, born in Kansas. Acute papular urticaria. The patient came to California at the age of two years, and after 24 hours had developed the disease which has continued without intermittence ever since, the itching being very severe. The boy was treated after the usual methods for three months without improvement. As the child was observed to be in the habit of playing with his penis and erections being frequent he was circumcised and adhesions broken up, more for the purpose of correcting the habit of masturbation than for its possible benefit upon the urticaria. Three months after operation the disease had disappeared, with no return to date.

We do not, of course, recommend promiscuous circumcision for the cure or prevention of urticaria, but in cases where other remedies are exhausted with no good result the disease is probably reflex and search should be made for phymosis and the prepuce removed with the view of removing this source of irritation. The hope is held out by our experience, that such removal will result in marked benefit, if not a cure in most cases.

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COMPULSORY STATE VACCINATION FOR INFANTS.*

BY F. H. MEAD, M.D., M. R. C. S., ENG. SAN DIEGO, CAL.

As an English Government Vaccination Officer of seven year's standing previous to coming to this state, my attention on arrival was naturally drawn to the regulations which governs such a preëminently valuable safeguard in California.

I found that anyone applying to a health officer may secure vaccination at any time, that the health officers have discretionary powers of vaccination, and that children on entering the public schools have to furnish a medical certificate of its successful performance.

Unless therefore the parents of children have in someway or other—practically or theoretically, had their attention drawn to the value of the operation at an early age in their children, we arrive at the very serious fact, that by far the larger proportion of children under say five years of age, remain unprotected, until just previous to their entering school. I need hardly point out the danger to the state, as well as danger to themselves this condition allows. It is unnecessary here I presume, to enter on any defence of vaccination, or to discuss its merits. I have not as yet heard of any anti-vaccination societies in the United States, such as exist among the ignorant and prejudiced in my own country, It is just, however, to say that opponents to the practice of the operation have been raised by the unskilful and careless practice of what is a simple enough piece of work, but at the same time one carrying with it very grave responsibility, and requiring the greatest possible care in selecting the source of the lymph used.

California preëminently requires compulsory vaccination at an early age. Con-

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sider her situation on the western ocean, the liability to infection of variola from without—from Mexico, Central America and from the Islands of the sea—in spite of careful quarantine. While within she has a somewhat large, but happily not increasing Chinese population, dwelling in colonies, in which the laws of sanitation are not easily enforced.

Zymotic diseases, I am aware, do not rage as freely as they do in other climates, at any rate in the southern portion of the state; but are epidemics of small pox unknown? Is the supply of lymph likely to be equal to a heavy demand, when a sudden scare sets in?

Recognizing therefore the comparatively unprotected condition of a large proportion of the youngest children in the state, I propose to ask your serious attention to devising methods which will remedy this condition of affairs, and to suggest some means whereby we may minimize what is always a terrible scourge. First of all let me give a brief resumé of the English vaccination regulations of to-day, at the same time time pointing out their weak points.

Vaccination of every infant over 3 months old is compulsory by Act of Parliament. A certificate of weak health will postpone the operation, which in the case of healthy children has to be performed before they reach the age of twelve months.

In every city and country district, two officials have the carrying out of these regulations in charge; the Registrar of Births, and the Government Vaccinating Physician. These in turn are supervised by a corps of Government inspectors who make periodic visitations and see that the work is properly carried out. A family physician may of course vaccinate when the parents desire. Vaccination stations exist in all these city and country districts. In the large cities the operation is performed daily, bi-weekly, or weekly, according to size. In the remote country districts twice yearly. The constant stations furnish lymph for those where vaccination only takes place every six months. In this way a continuous supply of lymph from arm to arm is ensured. No charge is made at the stations as the physicians appointed are paid from county rates. Certificates are issued in each successful case, which are sent to the registrar of births. Parents who refuse to have their children vaccinated can be summoned before a justice of the peace and fined, usually $10.

Re-vaccination of adults is performed at any time on application, and special sessions are established in the country districts in case of need. A complete and careful register is kept of every successful and unsuccessful case alike of vaccination performed, the source of the lymph being always exactly entered—a detail on the insistence of which the Government inspectors are rightly very particular. The payment to the officer is inadequate for cases at the home station—about 38 cents; those performed at stations more than 3 miles from home, are rated at $1.25—which in the case of 20 or 30 children means fair remuneration.

Arm to arm vaccination is encouraged, a process which entails the serious responsibility on the vaccinator to see that his source of supply is a perfectly healthy one. It is unfortunately established, that in careless hands syphilis has been propagated at Government vaccination stations, and children whose constitutions have been seriously injured for life after vaccination are the cause of strong feeling in many quarters against it. I have dwelt on the *modus operandi* of the English vaccination laws in some detail that I may point out their strong and weak points.

That every infant should be vaccinated when in good health between the age of 3 and 12 months is a proceeding the utility of which admits of no question. I am heartily opposed, however, to arm to arm vaccination. Personally I have

never had trouble in the many hundred cases which have passed through my hands—the occasional disastrous results which have followed it in large cities, owing either to haste or carelessness, speak against it. Vaccination from the calf has always been and will always be my favorite method—tuberculosis and any unhealthy taint being, of course, carefully eliminated.

I would enter my earnest plea for the establishment in Los Angeles or San Francisco, of a State station, in which pure calf lymph would be propagated for distribution throughout the year. Secondly I would earnestly suggest that this danger—the existence of unvaccinated young children, in large numbers, be met by a State regulation imposing vaccination on healthy children after 3 and before 12 months of age.

THE SHADOW TEST: A TEST FOR THE GENERAL PRACTITIONER.*

BY WM. D. BABCOCK, A.M., M.D., LOS ANGELES, CAL.
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It is estimated that from sixty to eighty per cent. of headaches are caused by eye strain. It would be a good thing if there were means by which the average general practitioner could tell patients when they come for the relief of headache or nervous troubles whether they need glasses or not. Not every one can afford the luxury of a specialist. That there are means at hand by which one can easily and soon determine the need or not for glasses, I believe. It is the purpose of this paper to call the attention of the general practitioner to a simple and easily acquired method, by means of which he can in a very few minutes decide the question of the probable need of glasses.

There are but two things that cause eye strain—error of refraction or ametropia, and muscular insufficiency or heterophoria.

I take it for granted that the average doctor recognizes and admits that eye strain is the cause of a great deal of the nervousness of Americans. I presume also that you know the conditions of the eye that are called hypermetropia, myopia, astigmatism, and presbyopia. These conditions do not have to be recollected in the test I will call your attention to, although it would be perhaps better for you to do so.

Every doctor should have in his office a set of Snellen's test type for distance and one for reading.

One set of Pray's astigmatic letters or an astigmatic dial.

A small hand mirror of about 20 inches focus, and 2½ inches in diameter.

Phantom eye.

One Maddox double prism 6°, 6 to 8 lenses, both convex and concave.

A light trial frame.

The total cost of these would be from $9.00 to $10.00. These would be enough for the average man to determine the existence of an error of refraction, need of glasses, and of muscular insufficiency, but not enough to measure the amount of either. If one wanted to go so far as to fit a large number of cases with glasses, the cost of instrument and lenses would not be far from $20.00. The test I want to call your attention to as being easy to make—say acquire, and which is exact and does not depend upon the answer of the one examined is called the shadow test—other names have been given, but this describes it the best I think.

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The test is simply watching the movements of the light and shadow caused by light being thrown into the pupil of the patient's eye. Upon the skill one has to see the movement and tell which way the shadow moves depends the accuracy of the observer. It can be learned in a very short time. In fact I have taught it to students who were able in from 15 to 20 minutes to tell in which direction the shadow moved, and with a little further instruction, to tell whether the patient was either hypermetropic, myopic or astigmatic. I believe one can learn the essentials of the test within an hour, or three or four lessons of ten minutes each —learn enough so that he can pursue his experiments alone, and with a very few trials be able to determine the need or not for glasses.

Jackson in his work on this subject gives as claim for consideration:

1st. That it is an objective test, independent of the patient's intelligence or visual acuteness, and more largely than any other, independent of the patient's coöperation.

2nd. It is by far the most accurate objective test. The limits of its accuracy depend on details of its execution, and the skill and patience of the observer, but it does not require any rare natural qualifications to carry it, for many eyes, to the extreme limits of accuracy for subjective tests.

3rd. It requires but little more time than the use of the refraction ophthalmoscope or ophthalmometer which are able to give very inferior information. It saves time in making a complete diagnosis.

4th. It requires no costly, complex or cumbersome apparatus.

5th. It lays before the surgeon the refraction in each particular part of the pupil as it is accomplished by no other test, and opens up the principal avenue for further advance in the scientific study of the refraction of the eye.

There are two means of making the examination, with a plain or concave mirror. There is no need to go into a description of these methods. If one method is well learned, the other will come easily. That with the concave mirror I think the easiest learned. To make the test, one should have a dark room and a small bright flame, the light being placed behind and just above the head of the patient. The physician seats himself about four feet away, in front of the patient, throws the light into the pupil and turns the mirror which is held against the forehead close to his eye, from right to left, and up and down. The physician sees a light followed by a shadow flit across the pupil. It is upon the accurate noting of the direction of this light and shadow, that the accuracy of the test depends. If the light is dull and moves slowly there is either high hypermetropia or myopia. If the light is bright and flies quickly across the pupil, there is little or no refractive trouble, no need for glasses. This is in a few words the test. What I have written is but a bare outline of the method. To go into details in a paper would take too much time for a meeting like this. The method, I can only say is simple, easily learned and accurate.

To determine whether there is a loss of balance in the muscles is also easy. By means of prisms that one can get prepared for the test, one can quickly determine which muscle if any, is too weak.

With a Maddox prism, which is a pair of six degree prisms, their bases together and horizontally placed before one eye, and closing the other eye, two lights will be seen one above the other, then opening the other, a third light will be seen. If the three lights are in the same vertical line, there is no loss of balance. If the middle light goes either to the right or left, there is a loss of muscular balance. Putting the bases perpendicular, the lights will be in a horizontal line if the muscles are in equilibrium. If the middle light is either above

or below the other two, there is trouble with the superior or inferior recti muscles.

I have not gone into details at all. If I have excited the attention of even one in this audience enough to cause him to look into and try the test, I will be well repaid, and I feel assured if one goes so far as to learn the outlines of the test that he will not rest there, but will go further into the details which are all easily acquired and are interesting. He will, after a few trials, be so interested that he will soon become fairly proficient in the test.

Stimson Block.

SELECTED.

DEPARTMENT OF MEDICINE.

UNDER THE CHARGE OF DRS. F. D. AND ROSE T. BULLARD.

CLIMATE AND HEALTH.—(*Popular Sc. Monthly.*) Chas. F. Taylor, M.D. It seems to me that climatology has heretofore to a large extent resolved itself into a search for some place where consumptives can not die. There is no such place. There is no place where the ever-present bacillus may not get in its deadly work. The chief question in climatology in its relation to health should be, "In what climate, or by what changes and influences of different climates, can we be best invigorated for good existence in the location where we are obliged to live the greater portion of our lives?" Many other causes besides tuberculosis men die of. Among civilized people, especially among our pushing Americans, debility, nervous exhaustion in one form or another, from overactivity of brain or body, render multitudes asthenic and vulnerable to the invasion of disease. We say that such cases need to be "toned up." This is undoubtedly true, but there are many cases in which the first step in "toning up" should properly be to tone them *down*. By that I mean that it is necessary to diminish the unnecessary expenditure of energy which has become a fixed habit of life. We all, as a rule, are too prodigal of our resources, and squander vast quantities in excess of what the occasion requires. It is amazing to see people, intelligent about ordinary things, traveling for their health at a rate that suggests that they have been shot out of a gun. Many do, of course, get a limited benefit in the change of subjects of thought, but they often mistake change of feeling due to excitement for recuperation. We need to learn how to stop. Instead of rushing across the face of the earth in the delusive hope of finding health on the other side, we need to learn how to sit down and make ourselves comfortable where we are. A man who had lived to a great age in health and contentment was asked to give some simple rule of life out of his experience. In reply he said, "The only rule I can give is, 'Always keep comfortable.'" I feel confident that a well-selected residence in the tropics from time to time will prove helpful in acquiring habits of reposefulness. Tropical heat is not oppressive, as many who have not tried it seem to suppose. It is very different from the same temperature as indicated by the thermometer during a northern summer. One does not fret about the tropical heat as he is apt to do here, but is inclined to keep quiet, lie down and sleep a good deal during the daytime as well as profoundly all night. Wakefulness is a rarity. The relief from nervous tension and irritability is inexpressibly delightful. The increased action of the skin relieves and gives needed rest to the overworked kidneys, the air passages are bathed by a moist, bland, nonirritating warm air, no chilly draughts scourge the nerve centers into activities wasteful of

energy, morbid appetites are allayed, digestion is improved in sympathy with increased skin activity, and the poor invalid begins to feel that, after all, life may be worth living.

It should be understood that I do not think all cases would be benefited by a sojourn in a tropical climate, but I feel assured that for a large number of carefully selected cases no resource of climate can be so promotive of improved metabolism as a well-selected location and suitably regulated life during several winter months in the tropics, from time to time, especially if closely followed by a change to a higher latitude or altitude and cooler locality during the following summer.

Not least among the advantages of a tropical climate for a temporary sojourn in certain cases is the change of food which is, or at least ought to be, always effected. In the first place, there are not many of our American stomachs that do not need a rest, and one of the objects to be sought in living in a warm climate is to give the overworked stomach a chance to recuperate; not only because there is no necessity for the same amount and quality of food to be digested, but we can find in the fruits of a country food which is not only very easily digested, but which supplies nearly all the requisites for wholesome nutrition under the changed conditions. The best fruits of the tropics are very perishable—so much so that we never see them in New York. Now, I am not advocating an exclusive fruit diet; but I think when people from the north go to the tropics for "climatic therapeutics" they should make it a point to eat very sparingly of meats and even farinaceous food, and endeavor to supply Nature's wants by using largely of the fruits of the country—especially those soft, sweet, and perishable fruits which do not last more than a day or two. Thus we have, besides the influences of steady warmth and moisture, the added advantage of a change of diet, which is no small factor in modifying the metabolism which we seek.

The larger number of invalids and tired-out people will continue to go to Europe for their change, and undoubtedly that is the better course for the majority, and, when properly managed, the "therapy of climate" may be sufficiently realized in that manner in most cases. There are many advantages to Americans in visiting Europe, not the least of which is the change of interests which new and different objects for contemplation furnish, and that fill the mind without taxing it to the temporary displacement of the business, political, domestic, or other cares and anxieties which are apt to hold our American mind in a tenacious grip from sheer force of habit. With three thousand miles of ocean behind us, it is not easy to talk "shop" with the neighbor at our elbow during the ten minutes some people devote to their lunch or dinner, and we are almost obliged by prevailing custom to take a reasonable time at meals and be quiet about it.

There is some danger to the novice in going into semitropical regions in being unacquainted with and unprepared for the degree of apparent cold which he is likely to find to his great surprise. And when he looks at the thermometer he is further surprised to see it so high while his feelings indicate a much lower temperature. He is still more astonished to notice that the natives do not mind the cold that makes the novice shiver. The fact is that without his accustomed fire and housewarming facilities, and subjected to air currents, the practical temperature in its physiological effects is much lower than the thermometer registers. In Spain, Italy, and in general along the Mediterranean shore, they have a semitropical climate during eight or nine months of the year, during which time the native inhabitants hold their calorifacient function in reserve, and when they reach their short and moderately cold season they have no difficulty in drawing

sufficiently on their reserve heat-making power. The man from the north has no such reserve, and what he has the temperature is not sufficiently stimulating to call into full activity. He has used up his caloric in the greater cold of the north. Northern people should be particularly careful in going to a climate with a temperature too low for comfort without a fire and too high for comfort with a fire. Even the increased sunshine is not sufficiently constant, and all rooms do not face the south. No matter what natives may say, Americans ought always to have the means for heating when occasion requires, and a southern aspect to their rooms everywhere in southern Europe, (southern California also, B.,) if they are at all sensitive to the cold, irrespective of the thermometer, or else travel north till they come to fireplaces, stoves, ovens, or other means for artificial warmth.

But it is not always convenient or even possible for one needing the therapeutic advantages of change of climate to go to Europe, nor is suc . a change necessary or even desirable in many cases. There is a great deal of as good climate as the world affords in our own country; and almost any change from low to high temperature, from damp to dry, from low to high altitudes, from seashore to mountains, from regions of high cultivation to the balsamic air of primeval forests or the reverse, can be had without the fatigue and expense of long sea voyages and wide stretches of turbulent sea between the traveler and anxious friends at home. The "sunny south" offers much that is admirable both in quality and variety of climate suited to various conditions. The main idea should not be the search for the perfect climate which does nowhere exist, but the question should be, "What change is indicated for the case in hand?" The question, to be properly answered, necessarily includes a knowledge of the region in which the individual has been living. Shall an inhabitant of Virginia go south or north for the winter? Or, had he better go west, or northwest? Shall a New-Yorker go to Florida, and, if to Florida, shall it be into the tonic Atlantic breezes of the eastern shore, or the milder and softer air of the Gulf coast? Does this person's condition and meteorological surroundings indicate a change to the rarefied air of Colorado or to the denser atmosphere of Tennessee, Michigan, or Minnesota? Ought the change to be to the moist breezes and frequent rains of Washington in the northwest or to the constant sunshine and more even temperature of southern California in the semitropical southwest? If the Pacific slope seems indicated, shall it be in the coast cool winds or the warm and calm interior valley? Or, had we not better make a new climate of our own? The bosom of great Ocean furnishes a variety of climates all its own. In former days a sea voyage was much resorted to for chronic invalids, and with decided advantages in many case.. A life at sea, if at all prolonged, has the disadvantage of leaving too many comforts behind to be recommended for any but the young and comparatively robust. It is said that three hundred miles from land the air is free from living germs. Many persons have returned from long voyages in health entirely restored.

But we need not go to sea, or go abroad, or even to the south, or to the wild west. We can make a climate of our own if we properly work for that end. It is not even necessary to rattle over ten miles of pavement in order to get a change of air. We have it right there on the veranda; we can have it fresh from the outside grand air, by opening the windows and opening them wide till all the stale air in the room is blown out and all the room is filled with ozone. We can change our food at home if we like. I know a man who almost rejuvenated himself by living on little else than fish, oysters, and clam juice for three months. We can regulate the temperature and take a sun-bath whenever the sun shines. And we can stop fretting if we are sufficiently determined to do so. Actions are but the evidence of a pre-determination. Why not determine to change our cli-

mate, when there is benefit to be derived from such change? It is against the law to live in cellars, but we make cellars of our rooms by keeping them filled with impure air. I do not inveigh, as it is the fashion to do, against the temperature at which our American houses are kept; a higher temperature is a necessity of our climate; but some one has yet to secure a fortune and the blessings of mankind by devising a system which will keep our houses always filled with living, moving, fresh air, and that will oblige everybody to attend to this matter as he ought.

And here I wish to enter an earnest protest against the practice of sending patients, often far gone with consumption or other wasting disease, away from friends and the comforts of home, without knowledge of what would be best for them, in a fruitless search for health, when, in their enfeebled state, better conditions could be instituted at home where at least they could die in piece. Some, not too far gone, do recover, it is fortunately true, but many lie buried there, and more are sent east in long boxes.

Probably no one lives who is capable of answering all the questions relating to "therapeutics of climate," but they will be answered some day and correctly answered; and when answered it will be found, I believe, as a general thing, that the best climate for consumptives is also the best for other persons in like general physical conditions. Twenty years after our profession more fully realizes the immense value of "climate in therapeutics"—and hundreds of capable men have been studying the subject from that point alone, and valuable material has been created to draw upon—a climate-therapy may be formulated which will give the divine art of healing a new uplifting, not less glorious than that which in our day has attended the labors of Pasteur, Koch, Lister, and others whose immortal services have so enriched the world.

DEPARTMENT OF SURGERY.

UNDER THE CHARGE OF JOS. KURTZ, M. D., PROFESSOR OF CLINICAL SURGERY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA, AND CARL KURTZ, M. D.

BRAIN SURGERY FOR EPILEPSY.—(*Cincinnati Lancet-Clinic*:) By B. Merrill Ricketts, M.D., Cincinnati. While the results from operations for epilepsy have not been as gratifying as hoped for, enough has been accomplished to justify operative interference in any case. This statement is made without reserve until we know more about the etiological and pathological conditions of the disease.

The causes of epilepsy are no doubt numerous. That trauma at some time in the course of life is the most frequent and important factor in causing the disease, is, I believe, a foregone conclusion. This being true, surgery, and not medication, is indicated, and, as surgical interference does not aggravate the disease, it is doubly justifiable, as nothing but the opening of the cranium will determine the condition within it. We have conclusive evidence that certain traumatic cases are entirely relieved; the relief of insanity due to traumatism is also established.

That pachymeningitis is a frequent cause cannot be questioned, especially in the offspring of syphilitics. Inherited syphilis and tuberculosis are perhaps equal in frequency in causing adhesion of the meninges. The probabilities are that syphilis is oftener the cause of meningitis, and consequently epilepsy, than it is supposed to be.

The lesion once located, there can be no question as to the propriety of attacking it, whether in the cerebellum or hemispheres. Recovery following the

removal of tumors and fluids of all kinds is possible. Perhaps the most remarkable case illustrating what can be done in the way of removing fluid from the cerebellum is that recently operated upon by Dr. Parker, of Cleveland, where four ounces of fluid were removed and followed by recovery. Operative interference is also justified in cases of hemorrhage from any cause, whether extra or subdural, or within any portion of the gray or white matter, symptoms, of course, governing the time and extent of operation.

The most treacherous circumstances surrounding a patient are in injuries of unsuspected fractures; this class of head injuries is therefore the most misleading. In reality, the cranium should be exposed for a through examination in all cases of head injury, whether or not the scalp be contused. The slightest bone fissure is sufficient evidence that the dura should be reached and brought to view, whether there are cerebral symptoms or not. The enlarging of a fissure, even though the result of the exploration be negative, is safer than allowing the intracranial conditions to go unobserved.

Three cases are herewith appended, each of which has its individual and exceedingly interesting characteristics.

Case I. Male, white, eight years old, fairly nourished, with a somewhat undeveloped right brain. His physical and mental condition normal up to the end of his second year; at this time he fell backward in a convulsion without any apparent cause; the convulsions continued in frequency and severity, and while his physical development continued, his mental faculties became at once impaired; he never learned to talk and was without reason. This state of affairs continued, with all sorts of medication, he having been placed under the care of several of the most prominent physicians of this country. He would eat or drink anything, having the habits of the ordinary imbecile, and would give no warning of any natural demands.

Without offering any encouragement to the parents, but at the same time believing it a duty, after observing him in several convulsions, that portion of the cranium overlying the psycho-motor area was removed on May 20, 1895. The right dura was very much thickened and firmly adherent to the entire surface of the skull. The adhesions were relieved in all directions with a long, thin, narrow spatula. There was a very considerable amount of straw-colored fluid that escaped from the arachnoid cavity. The cutaneo-periosteal flap was sutured with silkworm-gut, with some of the same material protruding for drainage.

A circumcision was made on June 1, and a right herniotomy on June 7 following, the object being to place him in as good condition as possible when sent to an asylum, if that were found necessary. The herniotomy did away with the necessity of wearing a truss, which was exceedingly objectionable in the care of the patient. After the operation for hernia it was found necessary to give morphia occasionally, as he was restless to such a degree as to make it necessary to keep him in a straight-jacket.

He left the private hospital on July 1, not having had a convulsion since the second day after the operation upon the head. A letter from his father, dated July 14, states that "he goes to bed from eight to nine of his own accord and of his own pleasure, and sleeps soundly until about seven next morning. He is neither tied nor held, and is quiet and never utters a scream of any kind. The epilepsy, or any semblance of it, has entirely disappeared; he is gaining in strength and flesh, and if the boy gains as much in the next three weeks as he has in the past three weeks I would not be surprised to see him holding a partially intelligent conversation. The change in him is most miraculous, and the people

in the neighborhood and our own family are beginning to have great hopes of his regaining his mind partially, if not entirely."

About the 18th of July, while on a visit to a neighbor with his mother, he ate some "Rough on Rats," which was mixed with sugar and lying on a saucer on the table for the destruction of flies. He died at the end of three hours—rather an abrupt ending as compared to the last two months of his life. Although the condition of the child was very much improved, his case is one of speculation as to what the result of the operation would eventually have been.

CASE II. Male, aged fourteen, white, American, fairly well nourished and developed, head slightly non-symmetrical, mental condition fairly good, prepuce very elongated and penis appeared to be that of a masturbator. He had taken various remedies in the way of medication without any special avail.

Being admitted to the hospital on June 10, an opportunity was given the attenddants to observe him in several attacks, all of which were severe and preceded by a loud scream, the spasm lasting from four to six minutes. There was general trembling and rigidity of all the muscles; the legs were both drawn to the right side, the left being nearly straight but adducted; the right was slightly flexed and more rigid than the left; the left arm rigid but straight; the right arm flexed, forearm on arm and under fingers to the limit; the head was drawn backward to the right; eyes to the extreme right and pupils widely dilated. This was about the condition found in each of the convulsions observed during the seven days he was in the hospital before operation.

On June 17, in the presence of Drs. Heady and French, the attending physicians, a double craniectomy was made with mallet, chisel and forceps. The opening upon the left side was three inches long and two inches wide, while that upon the right side was four inches long and two inches wide, both antero-posterior, leaving the cranium in the median line about an inch and a quarter wide over the longitudinal sinus. The dura was adherent throughout, necessitating the use of the small spatula to detach from the skull. The dura was divided transversely, leaving bands of it one inch in width. In this way no hernia of the brain substance could result, while at the same time a through exploration of the adjacent tissues could be made. The integument and periosteum, which included all the vertex, was brought from behind forward; it was replaced and sutured with silkworm-gut, a few threads being left for drainage. A simple collodion and gauze dressing was applied. He had six severe convulsions from the time he was operated upon until he left the hospital for home.

October 21, 1895. Dr Heady states that patient is no better, the convulsions continuing with about the same frequency, but that the boy admits to having indulged in masturbation just prior to each epileptic attack.

CASE III. Male, nineteen, white, six feet tall, weighing 160 pounds, and of most excellent habits. On April 1, 1893, he was struck on the frontal bone by a 32 long pistol-bullet at a range of about three feet; the point of entrance was one and a half inches above the orbital prominence and a quarter of an inch to the left of the median line, and its exit about two and a half inches from the coronal suture, one-half inch to the left of the median line; but one-half of the bullet escaped through his cloth cap, the other half remaining in the diploë; the hemorrhage was profuse. While he fell to the ground immediately upon receiving the injury, he did not become unconscious until the end of forty-eight hours, at which time he began to be semi-unconscious, and continued so until the eighth day, when a few pieces of bone, together with the remaining portion of the bullet and a small piece of cloth, were removed. The semi-unconsciousness was not relieved, but continued until the end of the twenty-first day; the sense of

sight was lost, taste blunted, and hearing dull after the first forty-eight hours, and for the first eight weeks he did not speak a word, after which his articulation was very poor. Convulsions began seventy-two hours after the injury, lasting for three weeks, and then did not return until December 10 following. It was five weeks from the time of injury until the patient could creep; he could use crutches at the end of the eighth week, and continued to do so until the end of the tenth week, after which time he discarded their use, and adopted that of a cane. The right arm and leg were paralyzed during all of this time. His tongue was drawn to the right side, while the left side of his face was paralyzed during his unconscious state. There was retention of the urine, but the sphincter ani was unimpaired. Food or fluid of any kind was swallowed with the greatest difficulty. The impaired special senses gradually became normal, and, while he regained his flesh and the use of his extremities, convulsions would occasionally manifest themselves, greatly increasing in number and severity until he would have two or three daily—sometimes as many as six; this frequency did not begin, however, until April, 1895. There was no pain following the first forty-eight hours of the injury until within the last six months, since which time headache has been rather constant and severe, especially over the seat of injnry.

I was consulted July 9, 1895, with reference to an operation. An exploratory incision was advised and readily consented to. An omega-shaped incision was made, extending backward to the coronal suture, in such a way as to allow the skin and periosteum to be drawn forward over the orbital prominences. The opening, which was about three-fourths of an inch long and three-eighths of an inch wide, extending antero-posterior in the skull, could readily be seen; this opening was enlargened by mallet, chisel, and Rogeur forceps to about the size of a silver half-dollar. During this stage of the operation about two drachms of creamy fluid escaped through the cavity beneath. It was found by the introduction of my finger that the cavity was about the size of a small hazelnut, and part of its wall was composed of the longitudinal sinus. There were exaggerated pulsations of the dura. In the bottom of the cavity could be felt a spicula of bone, triangular in shape, the point of which extended downward, backward, and outward into the arm and leg centre; it required considerable force to extract it with forceps; it was one inch long, a quarter of an inch thick, and a half inch wide at its base. The cyst appeared to lie external to the pia and the part of the brain involved in the middle third of the antero-posterior convolutions, together with the upper third of the antero-posterior convolutions, including their junction in the para-central lobule.

After thoroughly cleansing the cavity, a sheet of 23-carat gold, weighing two pwt., and two and a half inches square, was placed sub-periosteally in such a way as to allow the drainage to gravitate backward. Silkworm sutures and a collodion dressing were applied and primary union secured. After a few hours he expressed himself as feeling better than he had for some time; he had complete control of the toes in the right leg, which was not the case before the operation; the numbness in the right arm and leg had entirely disappeared, the tingling sensation in them having ceased; there was no defective articulation, which had so long existed. He left the private hospital at the end of fourteen days, having had but one convulsion, and that within three hours after the operation. He has taken no bromides or medicines of any kind since the operation. He has gained from ten to fifteen pounds in flesh and has not been unconscious since his departure. He has, however, on several occasion had numbness and unpleasant sensations in his right side and extremities; otherwise he is in a normal condition.

OBSTETRICS AND GYNECOLOGY.

UNDER THE CHARGE OF WALTER LINDLEY, M.D , PROFESSOR OF GYNECOLOGY IN THE COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA.

GLYCERINE AS AN OXYTOCIC.—(*Medical Age.*) Dr. Cowan of Toronto, Ontario, says, "One day I was called in a hurry to attend a young woman with her first-born. Not having been previously engaged for the case, I found upon my arrival that the necessary preparations had been overlooked. After the usual cautions I proceeded to examine, and found the os uteri well dilated, membranes unruptured, parts small, and pains of a very weak nature with long intervals between. Upon inquiry I elicited the fact that she had then been in labor about twelve hours, but it had not been considered necessary to send for a physician, the pains being so very weak. Thinking I had a long and tedious case before me, I adopted my usual routine practice of placing a glycerin suppository in the rectum. It had not been long *in situ* when my patient implored me to remove the "horrid thing," as it caused very severe pain. I assured her, however, that the suffering thus induced would cease as soon as the bowels moved. Presently, and much to my surprise, I discovered the pains were those of labor, the intervals being quickly shortened.

After eight or ten strong pains I again examined and found little or no progress of the head; and at the persistent and repeated request of my patient I removed the suppository—that is, what remained of it. Immediately the pains ceased and the intervals again became lengthened. After waiting for an hour or more, it suddenly occurred to me the glycerin suppository previously placed must have acted otherwise than expected—that in fact it might have stimulated the uterus to activity. Anxious to determine if such were the fact, I introduced a second suppository in the rectum, assuring the woman that this time it must remain. As a result, I was soon rewarded by increased uterine contractions with hard labor pains. Then I resolved to learn something new—I resorted to frequent examinations, taking the time between the pains. Gradually but quickly I noticed the advance of the head, and when it was well down upon the perineum, the latter being very rigid, I placed the patient upon her left side in all readiness for delivery. Supporting the perineum, the head was shortly born, but at the same moment the remaining undissolved portion of the glycerin suppository "popped" out. Needless to say, I was amused as well as gratified by the novel experience and use of the suppository.

Before making known the above, I experimented upon twelve cases, the notes of which I have in my possession, and in all these I conclusively proved to my own satisfaction the efficacy of glycerin suppositories in such cases, and now would not feel at all armed without them."

URINATION AFTER LABOR.—(*Rev. Internatinale de Bibliog Med.*) Dr. N. Recht in a thesis has made a study of micturition in the lying-in period. He comes to the following conclusions:

1. Urination after labor, in the majority of cases, follows spontaneously.

2. Catheterization is but exceptionally required; if it be necessary, it should be deferred as long as possible.

3. It is only indicated when the bladder assumes abnormal proportions, or if retention occurs.

4. Catheterization is liable to occasion two evils—cystitis, in spite of all precautions, and dependence of the bladder for a time upon the catheter.

RECTAL RESECTION IN THE FEMALE—VAGINAL METHOD.—(*Cent. fur Chir.*, No. 10, 1895.) Rehn. Plug the rectum with antiseptic gauze and disinfect the vagina thoroughly. Incise the posterior vaginal wall and separate it from the diseased gut. Incise the perineum in the middle line, and isolate, ligature, and divide the rectum below the seat of disease. Draw the upper and cancerous portion of the gut through the vaginal wound and incise it. The advantages of the method are that there is but little hemorrhage, the diseased parts can be freely exposed, an opening in the peritoneum can be easily dealt with, and enlarged glands in the mesorectum can easily be removed.

ASEPTIC CATGUT.—(*N. Y. Medical Journal*, April 20, 1895.) R. H. Cunningham. Wind commercial surgery catgut on a glass spool, not too tightly, and soak for two days in a mixture of equal parts of alcohol and ether, to thoroughly remove the grease. Rinse in alcohol for a few moments, and place in a small jar, with a tightly-fitting cover, containing enough of a mixture of equal parts of formalin and alcohol to submerge the catgut. After several days remove the catgut and wash out the formalin by soaking it several times in fresh alcohol, or, preferably, by boiling it for half an hour in normal saline solution. Place it in alcohol for preservation.

STERILIZATION OF CATGUT.—(*The Universal Medical Journal.*)—Dr. Lauenstein, of Hamburg, said that he had found in catgut sold as sterilized several kinds of bacteria, such as bacillus subtilis, staphylococcus albus, and micrococcus tetragonus. Suppuration, he was sure, often arose from catgut sutures. In thirty-five out of one hundred and forty-nine specimens of catgut he was able to cultivate the bacteria on gelatin. The greatest number of germs were observed in catgut sterilized by a dry process.

Professor Kocher stated that, in his operations for goitre, primary union was obtained in only 35 per cent. of the cases when sterilized catgut was used, but in 85.7 per cent. when sterilized silk was used. He has now completely abandoned aseptic sutures, and only employs silk made antiseptic by an alcoholic solution of bichloride of mercury. Since adopting this method he has obtained primary union in every case. The question being very important, Professor Kocher suggested the making of a collective investigation, and his proposition was adopted.

GLYCERINE INJECTIONS AS AN OXYTOCIC.—(*British Medical Journal*) Pelzer read a communication on this subject at a recent meeting of the Cologne Obstetric Society. He had collected twenty-eight cases, including nineteen in his own experience. Glycerine was used eighteen times for induction of premature labor; in fifteen of these cases the pelvis was narrowed, in two there was Bright's disease, and in one placenta previa. To stimulate uterine action at term glycerine was injected in seven cases of simple atony, in two of placenta previa, and in one for some other complication. The pains came on after an average interval of two hours following the injection. Eight to ten hours elapsed before complete dilatation of the os, or a longer space of time in cases of contracted pelvis. Two of the mothers died, both from severe eclampsia; the fœtus was putrid in both cases. One child required craniotomy on account of its great size. Three children died from placenta previa and strangulation by the funis. One, hardly thirty-two weeks old, died a quarter of an hour after birth. Only in one case could the violence of the pains be a possible cause of the death of the child. The glycerine had done its duty. Pelzer, however, deprecates injudicious zeal about this method; thirty to fifty cubic centimeters, not 100 cubic centimeters, are sufficient for injection. The method is not suitable for cases of eclampsia and placenta previa, except the lateral variety, where the placenta can be avoided.

Geuer (*ibib*) read notes of the three cases of induction of premature labor by injection of glycerine, in all of which both mother and child were saved. The first two mothers were over thirty-two, with contracted pelves; craniotomy had been performed in previous labors. The third case was an instance of bad eclampsia; forty grammes of glycerine were injected, the os being at the time uncontracted; there was œdema, with much albuminuria. Forty hours later, a healthy living child was born.

NERVOUS AND MENTAL DISEASES.

UNDER THE CHARGE OF H G. BRAINERD, A.B., M.D., PROFESSOR OF MENTAL AND NERVOUS DISEASES, COLLEGE OF MEDICINE, UNIVERSITY OF SOUTHERN CALIFORNIA.

A NEW TREATMENT FOR EPILEPSY.—(*Alienist and Neurologist.*) Dr. von Bechterew employs the following combination in the treatment of this disease: Adonis vernalis leaves, 2 to 4 grammes; infuse in boiling water, 180, then add bromide of potassium, 5.7 to 11.25 grammes; codeine 12 to 18 centigrams. From four to eight tablespoonfuls daily in water or sweetened milk.

Professor von Bechterew has never met with a single case of epilepsy in which it did not considerably lessen the number and intensity of the attacks. Not unfrequently the convulsive paroxysms rapidly and completely disappeared. He attributes the favorable effect of the addition of adonis vernalis to the bromide, to the constrictive action of the medicament on the cerebral vessels. It may be replaced by digitalis, but this combination is not so convenient and is less satisfactory, inasmuch as digitalis cannot be administered continuously on account of its cumulative effect.

REFLEX CAUSES IN CHILDHOOD NEUROSES.—(*Alienist and Neurologist.*) Rachford says: The nervous system of the child is more irritably unstable by reason of incomplete functional development, the inhibitory control of higher nerve centers on spinal reflex movements is feebly developed in the child. Blood changes are much more common allies of reflex disturbances in producing nervous diseases in children than they are in adults. Reflex causes are very much more frequent in girls than in boys or in female adults. The approach of puberty with the functional development of ovaries and uterus is a source of constant reflex disturbance; after the full functional development of these organs the reflex excitation is intermittent and confined to a period just before and during the menstrual period. Inhibitory control of the spinal motor centers more readily gives way in young girls than in boys of the same age. The social conditions and habits of life of the young girl predispose her to nervous disease. Blood changes which produce nervous irritability are very much more common in girls than in boys.

PRACTICAL DIETETICS.

By W. Gilman Thompson, M.D., Professor of materia medica, therapeutics, and clinical medicine in the university of the city of New York, visiting physician to the Presbyterian and Bellevue hospitals, etc., (pages 142 and 143.) Diastase is a vegetable ferment which has the property of converting starchy foods into a soluble material called maltose. Like the ferments in the saliva and pancreatic juice, it acts in alkaline solution, but, unlike them, it continues to operate in acid media and, therefore, its action is not disturbed by the gastric juice. Diastase is a peculiar substance which causes the ripening of fruits and vegetables by converting their starches into dextrins and sugar; hence fruit becomes more and more digestible as it ripens.

Maltine is made from three cereals—barley, wheat and oats. *It is rich in diastase.* It may be taken either plain, with cod liver oil, with coca wine, with pancreatin, with hypophosphites, etc., in tuberculosis and other diseases.

VIEWS AT JACKSON'S NAPA SODA SPRINGS—The Home of Napa Soda Mineral Water.

SOUTHERN CALIFORNIA PRACTITIONER.

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F. D. BULLARD, A.M., M.D.,
Editors and Publishers Southern California Practitioner,
107 North Spring street, Los Angeles.

Communications are invited from physicians everywhere; especially from physicians of the Pacific Coast, and more especially from physicians of Southern California and Arizona.

EDITORIAL.

THE DISTRICT SOCIETY.

The sixteenth regular semi-annual meeting of the Southern California Medical Society was held at the parlors of the Hotel Westminster, Los Angeles, Dec. 4th and 5th. There was an unusually long program, and as a larger number of papers than common materilized, an extra session was held the evening of the fifth. The discussion was lively, and indeed this session was characterized as being the most solidly given to work of any of the meetings ever held by the society. By request the committee of arrangement refrained from making provisions for entertainment. The sessions were quite well attended, and twelve new members were added.

The executive committee did not recommend any place for the next meeting; the last two sessions having been in Los Angeles, it was thought best to hold the next meeting in some other locality, but as no invitations were given, the committee concluded to consider the subject longer, and announce by letter or through the PRACTITIONER.

We think that the benefit to any place in having the society meet there ought to be an inducement for the profession to secure it. All the counties but one have given a cordial reception to this society. No section can afford to isolate itself professionally, for nothing so brightens up knowledge and broadens views as the interchange of thoughts at a live Medical Society.

LOS ANGELES COUNTY MEDICAL ASSOCIATION.

At the last regular meeting of the Los Angeles County Medical Association the following officers were elected:

President, H. G. Brainerd; Vice-President, E. A. Praeger; Secretary, Rose T. Bullard; Assistant Secretary, F. D. Bullard; Treasurer, Joseph Kurtz. The first meeting of the new year will be held at the new medical college on Buena Vista street, Friday, January 3rd. The retiring president, Dr. O. D. FitzGerald will give the annual address. It will be an open meeting to which the profession and the public are cordially invited.

DR. A. F. DARLING.

Dr. A. F. Darling, professor of ophthalmology and otology in the Los Angeles Medical College, died of hemorrhage from the lungs Dec. 11th. Dr. Darling was born in Kentucky in 1846, and graduated from Bellevue in 1868. He first practiced in Indiana; from 1877 to 1880, he studied in his specialty in New York, and since that date has practiced in Los Angeles. He was a member of the Los Angeles County and California State Medical Society. The doctor was well known and respected by all who knew him. He had a large practice, and did a great deal of quiet philanthropic work in the lines of his profession. He leaves a widow and four children to mourn his loss.

Dr. Wm. E. Quine, president of the Chicago College of Physicians and Surgeons, recently accepted an invitation from the faculty of Dunham Medical College, a new homeopathic institution, to lecture on the question, "Why I am not a Hahnemannian?" He concluded his remarks as follows: "Why is the medical profession still divided? Because the new school will not give up the name Hahnemann, though it has so unanimously discarded Hahnemann's teachings. They do not now maintain that "similia similibus curantur" is infallible or the only cure. Why longer repeat the shibboleth? Again, bigoted and irreconcilable anger on my side of the debate, lack of generosity, lack of everything that characterizes the Christian spirit, has been and is now of great assistance to my homeopathic friends in keeping us apart. All my powers, slight though they may be, are enlisted for reunion."

EDITORIAL NOTES.

Dr. C. M. Truesdell of Taylor's Falls, Minn., will make his home in this city.

Dr. A. C. Wright, has returned to his home in Minas Prietas, Arizona, after a stay of a couple of months in Los Angeles.

Dr. W. M. Johnston of Flagstaff, Ariz., is now located in Los Angeles; he is proprietor of the Figueroa Pharmacy, corner Figueroa and Pico streets.

Dr. H. S. Gordon, of Pomona, recently visited Tombstone and was so well pleased with the country that he has decided to locate there for the practice of his profession.

C. M. Smith of Pomona, graduated at Cooper Medical College this month. The *Pomona Beacon* says he will probably not locate there as it is too healthy to need any more doctors.

Dr. E. W. Moon, who returned to his old home in Indiana three years ago after spending two years in Riverside, has returned with his family and will become a permanent resident of that city. This is only the carrying out of a *natural* law; people can't stay away.

In speaking of the contemplated improvements at Fredalba Park, the *Saturday Review* says that the Messrs. Smiley intend to enforce a rule with regard to the lease of cottages in the park that is rather novel in this part of California, though such a regulation is maintained in many of the health resorts. No consumptive will be allowed to reside there. In barring sufferers of this disease from the park the owners are prompted solely by consideration for the health of others, since it is now generally conceded that tuberculosis is contagious.—*Redlands Facts.*

University of Southern California gets a valuable collection. Dr. Stephen Bowers, of Los Angeles, has given to the University of Southern California, his valuable library and vast collection of minerals and curiosities. The library consists of about 4000 volumes, mostly of scientific character, and there are between 40,000 and 50,000 specimens in the collection of curios and minerals, that has taken a lifetime to bring together, and have been gathered from every know country in the world. The money value of the collection is estimated to be between $6000 and $8000, but there are many rare and interesting things in it that could not be duplicated and that money could not replace. It is one of the most extensive and valuable private collections in the country, and the University of Southern California is to be congratulated on being the recipient of such a rare and noble gift.

Dr. F. F. Rowland, health officer of Pasadena reports for November twelve deaths in Pasadena, and vicinity, one being from consumption, one from acute pneumonia, one from acute bronchitis, one from disease of the stomach, one from disease of the heart and seven from all other causes. The officer adds that some cases of typhoid fever are reported on the low adobe section of the city near the southern border, which is largely occupied by Mexicans and washhouses. Much of the city's rubbish is allowed to be deposited there, and in most cases the people have their own wells.

It is proposed to change the rules of the house during the present session of Congress so that the list of committees shall include one on public health. Such a step can be taken none to soon. At the last session of the Public Health Association, it will be remembered, startling disclosures were made as to the pollution of the great waterways of the country—the Mississippi and other rivers—by the refuse of large cities. This is an evil that can only be remedied by federal action. The appointment of a public health committee should be followed by a thorough inquiry into the entire subject and recommendations from the committee to Congress for legislation to prevent the pollution of waterways and for such other sanitary measures as come within the province of the federal government.

The following from outside towns were present at the meeting of the Southern California Medical Society, Dec. 4 and 5: Dr. Geo. E. Abbott, Coronado; Dr. D. L. Beckingsale, Covina; Dr. C. S. Stoddard, Santa Barbara; Dr. W. A. Edwards, San Diego; Drs. Geo. Deacon, C. A. Briggs, J. E. Janes, F. F. Rowland and D. B. Van Slyck, of Pasadena; Dr. A. L. Kelsey, Santa Paula; Dr. C. E. Browning, Messina; Drs. I. D. Gregory and T. S. Covernton of Ontario; Dr. A. R. Chapin, Altadena; Dr. Chas. L. King, Sierra Madre; Drs. Wesley Thompson and S. G. Huff of San Bernardino. The new members received were as follows: Drs. Geo. E. Abbott, Jas. P. Booth, Chas. E. Browning, A. R. Chapin, A. Davidson, Louise M. Harvey, Chas. Lee King, N. H. Morrison, Claire W. Murphy, Anne W. Nixon, Mary Scott and F. O. Yost. Dr. W. G. Cochran, one of the founders of the Society, having resumed the practice of medicine, and Dr. W. W. Murphy, a former member, having returned to Los Angeles, were re-instated as active members.

On November 6th, 1895, the St. Louis Academy of Medical and Surgical Science was organized. The constitution of the society subscribes to the code of ethics of the American Medical Association. The membership is limited to fifty. No one can become a member of the Academy unless he possesses a good literary and medical educa-

tion. As evidence of his literary qualifications and ability as a scientific worker he must deposit with his application, a thesis, a pathological specimen with descriptive text, a drawing of a normal or abnormal specimen with text, or some other evidence of his worth. The evidence is passed upon by the committee on credentials. If the evidence is accepted, the ballot is taken. Two negative votes will defeat a candidate. The following officers were elected for the ensuing year: President, Geo. W. Cale, Jr., M.D., F.R.M.S., London; Senior Vice-President, James Moores Ball, M.D.; Junior Vice-President, Arthur E. Mink, M.D.; Secretary, Emory Lanphear, M.D., Ph.D.; Treasurer, Wellington Adams, A.M., M.D.; Orator, Thomas O. Summers, A.M., B.S., M.R.C.S., Eng., M.D.; Curator, George Howard Thompson, A. M., M.D.

THERE has been a wholly unnecessary and inexcusable deal of protesting made to the proposition of a California clergyman that some plan should be adopted to prevent the probable communication of disease by common use of the communion cup, says the Sacramento *Record-Union*. The idea has been condemned as sacrilegious and as interfering with a sacred office of the church. Even the Board of Health of San Francisco seems to have been impressed with that view of the matter. Yet the same body of sanitarians would unhesitatingly endorse the new school regulation of New York, which prohibits pupils from drinking from the same cup at the school house; that require all the door-knobs of the schoolroom doors to be wiped daily with a cloth saturated in a soda solution. If such regulation is wise for public schools, why should it not be equally well to provide that communicants should not use the same cup? It is in evidence that men and women with diphtheria have gone to the communion at the altar rail; that parties with putrid sore throat have in this sacrament used the same drinking vessel with those who were liable to be contaminated by their affliction. In no well ordered family does any person at the table use the same glass or cup at the same meal that is used by another. It is considered not only vulgar, but in a sanitary sense improper. What reason is there that the same cleanliness should not apply to the Lord's table?—*Ex.*

PAMPHLETS RECEIVED.

THE SURGICAL TECHNIQUE OF ASEPTIC WOUNDS. SANITATION IN STREET PAVEMENT. By HENRY O. MARCY, A.M., M.D., LL.D., Boston. Reprints from the Journal of the American Medical Association.

THE CONTAGION, MORTALITY AND PREVENTION OF WHOOPING COUGH. By WILLIAM SWEEMER, M.D., Milwaukee, Wis. Reprint from Transactions of the State Medical Society, 1895.

THREE CASES OF ENUCLEATION OF THE EYE, WITH REMARKS. By LEARTUS CONNOR, A.B., M.D., Detroit, Mich. Reprint from Harper Hospital Bulletin, December, 1891.

ELECTROTHERAPY AS A MEANS OF DIAGNOSIS IN GYNECOLOGY. By DR. G. APOSTOLI, Paris. "The General Therapeutic Effect of the Alternative Electric Current of High Frequency and of High Tension," by the same. Addresses at the British Medical Association, London, 1895.

A CASE OF HYDROSALPINX—REMOVAL OF THE RIGHT TUBE AND OVARY WITHOUT RUPTURE OF THE SAC. By HUNTER ROBB, M.D. Reprint from Western Reserve Medical Journal, Oct., 1895.

RETRO-DISPLACEMENTS OF THE UTERUS; THEIR TREATMENT BY A NEW METHOD, By ERNEST F. TUCKER, M.D., Portland, Oregon. Reprint from The Medical Sentinel, Aug. '95.

THE EVOLUTION OF RELIC WORSHIP, A PAGE FROM THE HISTORY OF MEDICINE. By P. C. REMONDINO, M.D. Reprint from The Medical Age, Oct. 10, 1895.

PANCREATIC CYSTS. By. P. C. REMONDINO, M.D. Reprint from The Los Angeles Polyclinic.

PERSONAL SERVICE AS THE ESPECIAL EXPONENT OF A GREAT PROFESSION. By HENRY O. MARCY, M.D., LL.D. Reprint from The Boston Med. and Surg. Journal, Sept. 26, 1895. "The Surgical Treatment of Inguinal Hernia," by the same. Reprint from the Transactions of the New York State Medical Association, 1894.

THE TECHNIQUE OF TENOTOMY OF THE OCULAR MUSCLES. By LEARTUS CONNOR, A.M., M.D., Detroit, Mich. Reprint from Jour. Amer. Med. Ass'n, Nov. 2, 1895

ANTIPHTHISIN. By CHAS. DENISON, A.M., M.D., Denver, Col. Reprint from the Medical Record, July 20, 1895.

PRESENT STATUS OF PULMONARY TUBERCULOSIS. By KARL VON BUCK, B.S., M.D., Ashville, N. C. Read before Alumnal Association of Cincinnati College of Medicine and Surgery, April 2, 1895.

CRANIECTOMY—AN IMPROVED TECHNIQUE. By A. H. MEISENBACH, M.D., St. Louis. Reprint from Jour. Amer. Med. Ass'n, Aug. 31, 1895. "Traumatic Separation (compound) of the Lower Epiphysis of the Femur." By the same. Reprint from Medical Record, Oct. 5, 1895. "Removal of Ingrowing Toenail—A Simplified Operation by Means of a New Instrument." By the same. Reprint from St. Louis Medical Review, July 27, 1895.

SURGICAL TREATMENT OF LARYNGEAL TUBERCULOSIS. By J. W. GLEITSMANN, M.D. Reprint from N. Y. Medical Journal, Oct. 19, 1895.

TREATMENT OF UTERINE RETRODISPLACEMENS BY VAGINO FIXATION, WITH REPORTS OF CASES. By FREDRICK HOLME WIGGIN, M.D., New York. Reprint from New England Medical Monthly, Oct., 1895.

RATIONAL TREATMENT OF PERTUSSIS. By FRANCIS T. B. FEST, M.D., Plank Road, Mich. Reprint from Jour. Amer. Med. Ass'n, Aug. 17, 1895.

BOOK REVIEWS.

AN AMERICAN TEXT-BOOK OF OBSTETRICS FOR PRACTITIONERS AND STUDENTS. By Jas. C. Cameron, M.D., Ed. P. Davis, M.D., Robt L. Dickinson, M.D., Chas. W. Earle, M.D., Jas. H. Etheridge, M.D., Henry J Garrigues, M.D., Barton C. Hirst, M.D., Chas. Jewett, M.D., Howard A. Kelley, M.D., Richard C. Norris, M.D, Chauncey D. Palmer, M.D., Theophilus Parvin, M.D., Geo. A. Piersol, M.D., Ed. Reynolds, M.D., Henry Schwartz, M.D., Richard C. Norris, editor, Robt L. Dickinson, M.D., art editor; with nearly 900 colored and half-tone illustrations. Philadelphia. W. B. Saunders, 925 Walnut St. 1895. $7.00 cloth, $8.00 sheep, $9.00 half Russia. For sale by subscription only.

The latest addition to Saunders' American text-books is this volume on Obstetrics. The prompt recognition by the profession of the merits of these text-books as seen in the success of the text-books on surgery, gynecology and medicine shows that this publishing house has hit on the true way of pleasing doctors. They give to the profession one or two volume works written by authoritative

specialists—and these books are *up to date*, and are ready for immediate application, whereas, if appearing serially through several years the earlier volumes would of a necessity be somewhat out of style. Again this work differs from the standard text-book on this subject by having the embodiment of the views of several rather than one prominent obstetrician. This text-book has cuts and full page plates, which in respect to artistic merit, accuracy and patness excel the illustrations of any similar book we have ever seen. Indeed, take the volume as a whole the verdict would be it is undoubtedly one of the best text-books on obstetrics published; rather we think it not over-praise to say it is the *best* single volume on this subject in the English language. The sections on anatomy and embryology more than fulfill the promise held out in the preface of being "attractive," they are scientifically beautiful. Piersol's clear descriptions are made still more impressive by Dickinson's choice illustrations. The having an especial art editor, if he is a discriminating man like Dr. Dickinson, is of no small advantage to any work.

Palmer, of Cincinnati, writes on the diagnosis and hygiene of pregnancy; the pathology of pregnancy is discussed by Davis of Philadelphia, Etheridge and the late Dr. Earle, of Chicago, and Kelley of Baltimore. The physiology of labor by Dickinson of Brooklyn, the conduct of normal labor by Jewett of the same city, and the mechanism of labor, is quite extensively handled by Reynolds of Boston. Dystocia is treated by Hirst and Parvin of Philadelphia. Jewett has a second series of articles on the physiology, diagnosis and management of the puerperium. Norris of Philadelphia, writes at length on the pathology of the puerperium, under which head Garrigues of New York, gives a paper on puerperal infection. Etheridge and Earle again are represented by articles on the physiology and pathology of the infant. Cameron of Montreal, writes on instrumental operations, Dickinson gives his final article on manual operations, and Hirst closes the book by an article on celiotomy for sepsis in the child-bearing period.

The above are only the gross subjects. Dystocia for instance is discussed under two different headings. I.—Anomalies in forces of labor. (1) Inertia uteri, (2) excessive expulsive forces (3) pelvic deformities, (4) description of the several varieties of pelvic abnormalities, (5) management of labor in contracted pelves, (6) obstruction to labor on the part of the soft maternal structures, (7) obstruction to labor on part of the foetus. II.—Dystocia due to accidents and diseases. (1) Accidents to the cord, (2) due to hemorrhage, (3) due to diseases of the mother. The book is well indexed—there being 35 pages devoted to it. The entire volume has 1009 pages.

ELEMENTARY TECHNIQUE IN HISTOLOGY AND BACTERIOLOGY.—By Ernest B. Hoag, A.B., B.S., instructor in Zoology and Physiology Throop Polyclinic Institute, Pasadena Cal., and H. Kahn Phas. IV, Assistant Demonstrator in Bacteriology Northwestern University Medical School, Chicago. 1895. E. H. Colgrove & Co., Chicago.

This is a concise yet sufficiently full account of histological and bacteriological technique for the beginner. It gives no descriptions but devotes close attention to the details of actual work. The book has the mark of being the handiwork of one versed in the needs of the new student, and the impress of a successful instructor, as we know Mr. Hoag to be. It is admirably adapted for its purposes. Of course, it is elementary and would not give much information to the advanced student, but we think if all the graduates are thoroughly drilled in this book they will be tolerably well equipped for actual work.

PHYSICIAN'S VISITING LIST FOR 1896.—Published Annually for 45 Years. Lindsay and Blakiston, 1012 Walnut street, Philadelphia.

This well know visiting list presents several improvements in the new edition

for 1896. More space has been allowed for writing the names and to the "memoranda page;" a column has been added for the "amount" of the weekly visits and a column for the "ledger page." To do this without increasing the bulk or price, the reading matter and memoranda pages have been rearranged and simplified. The lists for 75 patients and 100 patients will also have special memoranda page as above, and hereafter will come in two volumes only, dated January to June, and July to December. While this makes a book better suited to the pocket, the chief advantage is that it does away with the risk of losing the accounts of a whole year should the book be mislaid. The publishers announce that before making these changes they have personally consulted a number of physicians who have used the book for many years, and have taken into consideration many suggestions made in letters from all parts of the country. No Visiting List has been used to such an extent or for so long a time as this. There are none better suited to the work of the general physician, and keeping easily and systematically his business accounts and memoranda.

THE MEDICAL RECORD VISITING LIST AND PHYSICIAN'S DIARY FOR 1896. New revised edition. With calendar, tables of doses, tables of equivalents, directions for emergencies, antisepsis, disinfection, special memoranda, cash account, etc., etc. 30 and 60 patients per week, bound in black or red morocco leather with flap, $1.25 and $1.50. Circular on application. William Wood & Co., Publishers, New York.

This visiting list has 30 pages of condensed and essential information, including calendar, table of gestation, doses in both English and decimal system; solutions for subcutaneous injections and for inhalations; poisons and antidotes, antisepsis and disinfection and dentition.

It is arranged for 30 or 60 patients per week, 30 per page and on the opposite leaf columns for charge, page in ledger and special memoranda. This last feature is one of the chief advantages of this book. It is very convenient for indicating treatment,diagnosis, address, etc. A few notes jotted down here may save many a dollar, besides being of great help in subsequent visits. This pocket visiting list is especially adapted to any one having a fairly extensive practice, though very good and allowing more room for notes for the doctor having a fewer number of patients.

We are reminded of the rapid lapse of time by receiving from E. B. Treat, New York, notice that the *International Medical Annual* for 1896 will be shortly published. This valuable periodical will enter its fourteenth year, will be somewhat enlarged, copiously illustrated with colored plates and in black and white, but sells at the same price as formerly, $2.75. It will be uniform with Treat's Medical Classics, and is the conjoint work of forty distinguished specialists from America, England and the continent. It is to be hoped that it will sustain its reputation of being the physician's handiest and best one volume reference work. The plan will be quite similar to that followed in previous years, a review of therapeutics, descriptive articles on new remedies, a dictionary of new treatment and miscellaneous articles. The former patrons of the Annual will look forward to its issuance with pleasure, and those wishing to keep posted about the advances of the year will find this a valuable aid in their readings and daily work.

GREAT RELIEF.

J. Ringwood, L. R. C. P. I. and L. M. L. R. C. S. I., Kells, county Meath, Ireland, writes:

"I have had the most satisfactory results from the use of Lilly's Glycones. Besides their certain gentle action on the bowels, they give the greatest relief in all cases of pelvic congestion, pruritus and internal hemorrhoids."

MONTHLY METEOROLOGICAL SUMMARY.

U. S. WEATHER BUREAU, LOS ANGELES STATION.

Los Angeles, California. *Month of November, 1895.*

Date	TEMPERATURE Max.	Min.	Mean	Precipitation in inches and hundredths
1	89	55	71	0
2	78	49	64	0
3	58	53	56	12
4	64	44	54	28
5	65	44	54	0
6	71	45	58	0
7	75	47	61	0
8	76	48	62	0
9	76	47	62	0
10	71	49	60	0
11	61	50	56	.02
12	67	45	56	.02
13	72	48	60	0
14	77	47	62	0
15	84	56	70	0
16	86	58	72	0
17	87	54	70	0
18	94	54	74	0
19	92	50	71	0
20	85	55	70	0
21	70	46	58	0
22	62	44	53	T
23	59	42	50	0
24	65	36	50	0
25	68	42	55	0
26	71	45	58	0
27	67	40	54	0
28	68	43	56	0
29	57	50	54	0
30	64	42	53	.36
31				0

SUMMARY

MONTHLY RANGE OF BAROMETER:
Mean Barometer, 30.02.
Highest barometer, 30.30, date 14.
Lowest barometer, 29.71, date 22.
Mean Temperature, 60°.
Highest temperature 94°, date 18.
Lowest temperature 36°, date 24.
Greatest daily range of temperature 42°, date 19.
Least daily range of temperature 5°, date 3.

MEAN TEMPERATURE FOR THIS MONTH IN

1876		1882	58°	1889	61°
1877	63°	1883	60°	1890	66°
1878	59°	1884	61°	1891	61°
1879	57°	1885	60°	1892	62°
1880	56°	1886	57°	1893	57°
1881	57°	1887	60°	1894	59°
		1888	60°	1895	60°

Mean temperature for this month for 17 years, 60°
Total deficiency in temp. during the month, 1°
Total deficiency in temp. since Jan. 1, 267°
Prevailing direction of wind, Northeast.
Total movement of wind, 2201 miles.
Maximum velocity of wind, direction, and date, 12m, E. 23d.
Total Precipitation, 80 inches.
Number of days on which .01 inch or more of precipitation fell, 5.

TOTAL PRECIPITATION FOR THIS MONTH IN

1878	.00	1884	1.07	1890	.13
1879	3.44	1885	5.55	1891	.00
1880	.67	1886	1.18	1892	4.40
1881	.27	1887	.80	1893	.20
1882	1.82	1888	4.02	1894	.00
1883	.00	1889	1.35	1895	.80

Average precip'n for this month for 17 years, 1.48.
Total deficiency in precip'n during month .68 inches.
Total precip'n from Sept. 1,'95, to date, 1.04 inches.
Average precip'n from Sept. 1,'95, to date, 2.44 inches.
Total deficiency from Sept. 1,'95, to date, 1.40 in.
Average rainfall for 10 wet seasons, 21.58 inches.
Number of clear days, 22.
" partly cloudy days, 5.
" cloudy days, 3.

NOTE—Barometer reduced to sea level. "T" indicates trace of precipitation.

METEOROLOGICAL SUMMARY SOUTHERN CAL., NOVEMBER, 1895.

STATIONS	TEMPERATURE Mean	Max.	Min.	Mean Barometer	Relative Humidity	RAINFALL Days	Am't	WEATHER Clear	Fair	Cld'y	WIND Direction	Total Mov't
Los Angeles	60.	94.	36	30.02	60.	5	.80	22	5	3	N E	2,201
San Diego	59.	85.	38.	30.02	65.	8	1.19	21	4	5	N E	3,827
Santa Barbara	59.9	91.	40.5		56.	3	.77	22	4	4	W	2,815
Yuma	61.	85.	34.	30 00	47.	2	.37	23	7	0	N	4,899
Arlington Heights	57.	90.	31.			4	0.89	17	11	2	W	
Ontario	60.	90	35.			3	1.18	21	1	9	N E	
Pasadena												
Redlands	60.	89.	40.				1.17				W	
San Bernardino	56.	88.	29.			5	1.14	21	4	5	W	
Santa Ana												

OBSERVERS.—George E. Franklin, U. S. Weather Bureau, Los Angeles; M. L. Hearne, U. S. Weather Bureau, San Diego; Hugh D. Vail, Santa Barbara; A. Ashenberger, U. S. Weather Bureau, Yuma. JAMES A. BARWICK, Director California Weather Service, Sacramento, Cal.

REGISTERED MORTALITY OF LOS ANGELES.

WITH SEX AND NATIVITY OF DECEDENTS.

Estimated Population, 80,000 *November, 1895.*

CAUSE OF DEATH	Total Deaths	Annual rate per 1000	SEX		NATIVITY				RACE		
			Male	Female	Los Angeles	Pacific Coast	Atlantic States	Foreign Born	Caucasian	African	Mongol
Deaths from all causes	129	19.35	69	60	26	9	56	38	114	11	4
Deaths under 5 years	26										
i. Specific infectious diseases	29	4.35	16	13	8	1	11	9	27	1	1
ii. Diseases of digestive system	8	1.20	5	3	1	1	2	4	8		
iii. Diseases of respiratory system	32	4.80	16	16	6	1	17	8	26	4	2
iv. Diseases of nervous system	9	1.35	6	3	1	1	4	3	8	1	
v. Diseases of circulatory system, blood and ductless glands	11	1.65	5	6			8	3	10	1	
vii. Diseases of genito-urinary organs	8	1.20	7	1		1	3	4	7		1
viii. Constitutional diseases	14	2.10	5	9	6	1	3	4	13	1	
ix. Intoxication, violence, accidents	6	.90	4	2		2	2	2	4	2	
i. Miscellaneous diseases	12	1.80	5	7	4	1	6	1	11	1	
Septicæmia											
Pyæmia											
Diphtheria	1	.15		1	1				1		
Erysipelas											
Typhus fever											
Typhoid fever	4	.60	2	2	1		1	2	4		
Malarial fever											
Scarlet fever											
Measles											
Cerebro-spinal meningitis	6	.90	3	3	4			2	5	1	
Smallpox											
Tuberculosis	15	2.25	11	4	2		8	5	14		1
Influenza	2	.30		2		1	1		2		
Dysentery	1	.15		1			1		1		
Syphilis											
Tetanus											
ii Diseases of the œsophagus											
Gastritis											
Enteritis	1	.15	1		1				1		
Gastro-enteritis											
Cholera infantum											
Entero-Colitis	2	.30	1	1				2	2		
Appendicitis	1	.15	1			1			1		
Intestinal obstruction											
Diseases of liver	2	.30	1	1		1		1	2		
iii. Membranous croup	1	.15		1	1				1		
Bronchitis	3	.45	1	2	1		1	1	2	1	
Pneumonitis	8	1.20	2	6	1	1	4	2	8		
Pleuritis	1	.15	1		1				1		
Phthisis	18	2.70	11	7	2		11	5	14	2	2
iv. Diseases of brain	9	1.35	6	3	1	1	4	3	8	1	
Diseases of spinal cord											
Neuritis											
Epilepsy											
v. Diseases of heart	7	1.05	2	5			5	2	7		
Degeneration of arteries	4	.60	3	1			3	1	3	1	
Aneurism											
Anaemia											
vi. Uraemia	2	.30	1	1		1	1		2		
Cystitis											
Chronic Bright's disease	2	.30	2				1	1	2		
Nephritis	3	.45	3				1	2	2		1
vii. Rheumatism											
Gout											
Diabetes	2	.30	2				2		2		
Inanition	9	1.35	1	8	6	1	1	1	8	1	
Senility and Asthenia	3	.45	2	1				3	3		
viii. Alcoholism	1	.15	1					1	1		
Opium habit											
Suicide	1	.15	1					1	1		
Violence and accidents	3	.45	2	1		1	2		1	2	
ix. Tumors—malignant	4	.60	2	2	1		3		4		
Tumors—non-malignant	2	.30	1	1			2		2		
Other diseases	6	.90	2	4	3	1	1	1	5	1	

F. W. STEDDOM, M.D., Health Officer.

OUR ADVERTISERS.

S. H. MURPHY, M.D., Glendale, N. Y.—"I have used the vapo-cresolene in six cases of whooping cough of long standing, with marked relief in twenty-four hours, and entire cure in from three to five days. I have also used it in nasal catarrh, bronchitis and pharyngitis, catarrhal and diphtheritic, with great benefit. It is of great value in diphtheria."

J. H. EGAN, M.D., in the *Medical Summary*.—"I was sent for in great haste to visit a man who was said to be 'dying for want of breath.' I found him suffering from asthma. I furnished him with a vaporizer, and in fifteen minutes he was asleep and breathing easily. Whenever he feels premonitions of attacks, he prevents it by use of the vaporizer. In another case I was equally successful."

HOW A PHYSICIAN INCREASED HIS PRACTICE.

It is my pleasure, and also duty, to report that my success with Sanmetto is far beyond expectation. It has effected a cure in every case for which I have employed it. It has been a complete success in kidney and bladder troubles. I have also used it in gleet and gonorrhea with perfect satisfaction. In some cases I add one drachm of ergot and tr. opii, or liq. strychnia to the one bottle, as circumstances may call for, and I always have a favorable result. In short I have to say that my practice has increased considerably since I commenced the use of Sanmetto, and I prescribe it daily.

Marinette, Wis. N. J. LUND, M.D.

It is impossible to estimate the number of people who die annually of exhaustion in sickness while receiving the treatment that their diseases respectively demand. The friends and relatives are told the same old story "you did not call me in time. He died of exhaustion before the medicines had time to correct the disease." Renew your patient's strength with codliver glycerine and bridge them over this period until the curative medicine has had time to act. It mixes with all medicines.

THE DIETETIC TREATMENT OF PHTHISIS.

In the course of an editorial comment on a paper read before the Association of the Bellevue Hospital Alumni, by H. P. Loomis, M.D., the New Albany *Medical Herald* says:

"We have long preached the gospel of fat and have insisted that the scales are an important instrument of precision for the detecting the rate of progress forward or backward, not only in the treatment of this disease, but in the general oversight over our patient. A loss of weight is always a suspicious sign and should arouse our attention at once."

The gospel of fat is undeniably a good one but, like many other gospels, it is easier to preach than to practice it. Face the problem, as it presents itself in the everyday course of practice. Here is a patient with all the symptoms of incipient phthisis; a marked and continual loss of weight has been noted and this must be checked. Realizing that starch is the natural source of fat, we recommend that oatmeal, bread, potatoes, crackers and similar foods be more extensively

used. We may even be deluded into prescribing cod liver oil. A week ensues and the patient again comes in, looking worse than before, and bearing a tale of woe to the effect that the cod liver oil cannot be taken; that between it and the starchy diet which we prescribed digestive disorders has been set up and that further loss of weight has been recorded. The problem now begins to assume that phase which undertakers are so successful in solving. We know that what the patient needs is fat; we know that starchy foods and oils are fattening, but if they cannot be digested, what are we to do? It is just at this point that artificially-digested foods come to the rescue, and while disappointment may have followed their use in the past, owing to offensive taste or lack of permanency, the medical profession has now in Paskola a form of pre-digested starch which is acceptable to the most delicate stomach and which, aside from its nutritive qualities, is such an active aid to the digestion of albuminous or meaty foods that it is well nigh a specific in the ordinary forms of gastric indigestion. A rapid increase in weight almost invariably follows its use.

HEADACHES OF EXTRA-CRANIAL ORIGIN.

By Frank Woodbury, A.M., M.D., Philadelphia, Pa. Read before the Mississippi Valley Medical Association, at Hot Springs, Ark. In the discussion following the reading of this paper, Thomas Hunt Stucky, M.D. Ph.D., Professor of Theory and Practice of clinical medicine, Hospital College of Medicine, Louisville, Ky., said: "The paper just read is to me one of unusual interest and importance. When we take into consideration the many causes of headache, and look back upon the treatment for the past twenty years for the conditions by opium or its alkaloids, chloral, the bromides, etc., and remember their tardiness of producing relief, the danger of having our patients become drug-habitues, 'tis indeed a fact that antikamnia has proven a God-send to the people, as well as to the profession. One fact is evident, and that is that antikamnia has almost entirely displaced opium, its compounds and derivatives. If it has done this and nothing more, its mission is a great one and its usefulness thoroughly established. 'It does not depress the heart's action; it does relieve pain. An extended use from its first appearance on the market has served to increase my confidence in the great value of antikamnia.' "—*Medical Record.*

In reporting the case of a woman suffering from neoplasm in the stomach, Dr. Ernesto Costa, of Alagna, Italy, says:

"One can easily imagine the intense pain which entirely prevented her sleeping. I tried chloral and sulfonal, and although the latter answered fairly well for a time, it soon became necessary to discontinue it. I then administered Bromidia with the following results:

1. It produced refreshing sleep.
2. It soothed the pain, and thus rendered alimentation possible.
3. Although given in frequent, and sometimes tablespoonful doses, it never produced any nervous or cardiac disturbance."

RHEUMATISM AND ITS SUCCESSFUL TREATMENT.

By William C. Wile, A. M., M, D., LL. D., Danbury, Conn. Rheumatism, under its many forms and guises is one of the most common diseases that the New England doctor has to treat, and while the simpler forms yield readily to the proper medication, the majority are stubborn and resist all efforts of the practitioner to rout it. The following cases successfully treated with tongaline are, I believe, of sufficient interest to warrant their publication.

Carrie E., American, aged 9 years, was taken ill on the 17th day of January and I was called in to see her two days after.

I found the left knee and right ankle swollen, and exquisitely painful to the touch, she would scream out on every attempt to move her in the bed. Pulse 120, tongue furred and the temperature 102.2 I ordered the following:

R Hydrarg. chlor. mite, gr. v.
Pulv. rhei., gr. ij.
Soda bicarb., gr. v.

Sig. Make two powders. Give both at once and follow with a dose of castor oil in the morning.

R Tongaline, oz. ij.

Sig. Give 30 drops every hour until 10 doses have been taken and then give every two hours.

On the 22nd, I found the condition of the patient very materially improved. The swelling had diminished very considerably and the pain was much less. Had had a fair night's rest the night before, the first one she had had without an opiate since the commencement of her sickness. The tongaline was ordered given only every three hours and her improvement was rapid and satisfactory. In two weeks time she was about the house and all traces of the rheumatism gone.

Mrs. C., aged 59, Irish, whose surroundings were of the worst, was taken with inflammatory rheumatism of the left knee joint. It was swollen terribly and the pain was so great that she got no rest. Four compound cathartic pills, U. S. P., were given and the alimentary canal thoroughly unloaded when tongaline was given in teaspoonful doses every two hours. The pain began to be relieved in twenty-four hours and she had entirely recovered in three weeks. No heart complication ensuing.

The next was one of those distressing cases of muscular rheumatism of the subacute variety in a Mr. D., aged 44; American, laborer, who came to me suffering from great pains in the muscles of the arm and shoulder. The pain was such as to incapacitate him from pursuing his occupation as a track hand on the railroad. He commenced using tongaline in teaspoonful doses three times a day and at bed-time. The result was apparent by great improvement in two days and in one week's time the pain had all left him though I continued the administration of the medicine for a week longer in order to make assurance doubly sure. Since his first attack he had one other following a drenching in a rain which occurred about three months after. This treatment brought about the same happy result.

I was called March 3, to see Mr. B., Irish, laborer, who I found confined to his bed unable to move for severe pain in the lumbar region, affecting all the big muscles of that part. It was impossible for him to turn over in bed or to help himself in any way. I ordered a big piece of flannel to be spread thickly with equal parts of ichthyol and wool-ola and bound over the back tightly, giving two teaspoonfuls of tongaline every three hours night and day. Improvement took place in twelve hours so he could move his body with comparative ease though a good deal of pain still existed. The improvement continued so rapidly that at the end of the third day he was sitting up and the medicine was ordered to be taken in teaspoonful doses three times a day, and at the end of ten days he returned to his work on the streets where he had been employed before being taken ill.

These cases are of different types and illustrate the value of tongaline in all the different forms of the disease. I have a record of eighteen cases which have been treated with tongaline, all of which were successful excepting only one and that was complicated with gout.